

EXHIBIT 116-B
Redacted Version of
Document Sought to be Sealed

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

IN RE: FACEBOOK, INC., MDL No. 2843
CONSUMER USER PROFILE Case No.
LITIGATION 18-md-02843-VC-JSC

This document relates to:
ALL ACTIONS

CONFIDENTIAL PURSUANT TO THE PROTECTIVE ORDER

ZOOM DEPOSITION OF FACEBOOK's 30(b)(6)
CORPORATE REPRESENTATIVE - AMY LEE
(Reported Remotely via Video & Web Videoconference)
Alameda, California (Deponent's location)
Thursday, May 19, 2022
Volume I

STENOGRAPHICALLY REPORTED BY:
REBECCA L. ROMANO, RPR, CSR, CCR
California CSR No. 12546
Nevada CCR No. 827
Oregon CSR No. 20-0466
Washington CCR No. 3491
JOB NO. 5238557
PAGES 1 - 214

Page 1

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

IN RE: FACEBOOK, INC., MDL No. 2843
CONSUMER USER PROFILE Case No.
LITIGATION 18-md-02843-VC-JSC

This document relates to:
ALL ACTIONS

DEPOSITION OF AMY LEE, taken on behalf of
the Plaintiffs, with the deponent located in
Alameda, California, commencing at
9:22 a.m., Thursday, May 19, 2022, remotely
reported via Video & Web videoconference before
REBECCA L. ROMANO, a Certified Shorthand Reporter,
Certified Court Reporter, Registered Professional
Reporter.

APPEARANCES OF COUNSEL

(All parties appearing via Web videoconference)

For the Plaintiffs:

BLEICHMAR FONTI & AULD LLP

BY: ANNE K. DAVIS

BY: LESLEY E. WEAVER

BY: MATTHEW MELAMED

BY: ANNE K. DAVIS

Attorneys at Law

555 12th Street

Suite 1600

Oakland, California 94607

(415) 445-4003

lweaver@bfalaw.com

mmelamed@bfalaw.com

adavis@bfalaw.com

/////

APPEARANCES OF COUNSEL

(All parties appearing via Web videoconference)

For the Plaintiffs:

KELLER ROHRBACK L.L.P.

BY: DAVID KO

BY: CARI CAMPEN LAUFENBERG

BY: DEREK W. LOESER

Attorneys at Law

1201 Third Avenue

Suite 3200

Seattle, Washington 98101

(206) 623-1900

dko@kellerrohrback.com

claufenberg@kellerrohrback.com

dloeser@kellerrohrback.com

/////

APPEARANCES OF COUNSEL

(All parties appearing via Web videoconference)

For Facebook, Inc.:

GIBSON, DUNN & CRUTCHER LLP

BY: COLIN B. DAVIS

Attorney at Law

3161 Michelson Drive

Irvine, California 92612-4412

(949) 451-3993

cdavis@gibsondunn.com

and

BY: ROSEMARIE T. RING

BY: AUSTIN SCHWING

Attorneys at Law

555 Mission Street

Suite 3000

San Francisco, California 94105-0921

(415) 393-8247

rring@gibsondunn.com

aschwing@gibsondunn.com

/////

APPEARANCES OF COUNSEL(cont'd)

(All parties appearing via Web videoconference)

For Facebook, Inc.:

GIBSON, DUNN & CRUTCHER LLP

BY: ROBERT C. BLUME

Attorney at Law

1801 California Street

Suite 4200

Denver, Colorado 80202-2642

(303) 298-5735

rblume@gibsondunn.com

and

BY: SHAQUILLE GRANT

Attorney at Law

2001 Ross Avenue

Suite 2100

Dallas, Texas 75201

(214) 698-3204

sgrant@gibsondunn.com

/////

APPEARANCES OF COUNSEL(cont'd)

(All parties appearing via Web videoconference)

JAMS

BY: DANIEL B. GARRIE

Special Master

555 W. 5th Street

32nd Floor

Los Angeles, California 90013

(213) 253-9706

dgarrie@jamsadr.com

ALSO PRESENT:

Ian Chen, Associate General Counsel,

Meta Platforms

John Macdonell, Videographer

/////

I N D E X

DEPONENT	EXAMINATION
----------	-------------

AMY LEE	PAGE
---------	------

VOLUME I

BY MS. WEAVER	15
---------------	----

E X H I B I T S

NUMBER	PAGE
--------	------

DESCRIPTION

Exhibit 360	Facebook Inc Consolidated	17
-------------	---------------------------	----

Revenue Streams;

Exhibit 361	PowerPoint Presentation -	30
-------------	---------------------------	----

Guiding Principles for Ozone
strategy, FB-CA-MDL-03252528;

Exhibit 362	Facebook MAU and DAU,	37
-------------	-----------------------	----

2015-2021;

Exhibit 363	Chart - Excerpt re worldwide	46
-------------	------------------------------	----

ARPU;

/////

1	E X H I B I T S (cont'd)		
2	NUMBER		PAGE
3		DESCRIPTION	
4	Exhibit 364	facebook Q1 2018 Revenue	54
5		Review April 18, 2018,	
6		EY-FB-00002851;	
7			
8	Exhibit 365	Key Issues in Privacy,	103
9		FB-CA-MDL-02950555 -	
10		FB-CA-MDL-02950559;	
11			
12	Exhibit 366	Email String Subject: 9th top	109
13		domain for video clicks	
14		events, FB-CA-MDL-00165410 -	
15		FB-CA-MDL-00165493;	
16			
17	Exhibit 367	Memorandum of Understanding	120
18		between L'Oreal and Facebook,	
19		FB-CA-MDL-01835372 -	
20		FB-CA-MDL-01835379;	
21			
22	Exhibit 368	Email string, Subject:	130
23		Developers paying for special	
24		data, FB-CA-MDL-01994696 -	
25		FB-CA-MDL-01994698;	

1	E X H I B I T S(cont'd)		
2	NUMBER		PAGE
3		DESCRIPTION	
4	Exhibit 369	Email 9/8/2014, Subject:	138
5		Change to Custom Audience	
6		Creation Flow - FYI re	
7		Revenue impact,	
8		FB-CA-MDL-02148187;	
9			
10	Exhibit 370	Email string 3/27/2018,	142
11		Subject: Need messaging for	
12		board's call deck tomorrow	
13		(by EoD), FB-CA-MDL-01191149	
14		- FB-CA-MDL-01191153;	
15			
16	Exhibit 371	Slide deck titled "Addressing	149
17		Data Out / Data leaving the	
18		platform";	
19			
20	Exhibit 372	Email string 3/27/2018,	158
21		Subject: Message summary,	
22		FB-CA-MDL-01191351 -	
23		FB-CA-MDL-01191381;	
24			
25	/////		

1	E X H I B I T S(cont'd)		
2	NUMBER		PAGE
3		DESCRIPTION	
4	Exhibit 373	Email string 6/24/2018	183
5		Subject: A/C PRIV - RFI's to	
6		apps/developers this week,	
7		FB-CA-MDL-03055702 -	
8		FB-CA-MDL-03055706;	
9			
10	Exhibit 374	Document titled "Two	183
11		Different Methodologies to	
12		assess potential impact"	
13			
14	Exhibit 375	Excel spreadsheet labeled	203
15		"Monetization Metrics,"	
16		FB-CA-MDL-02936308.	
17			
18			
19			
20			
21			
22			
23			
24			
25	/////		

1 Alameda, California; Thursday, May 19, 2022 09:04:04
2 9:22 a.m.
3 ---o0o---
4
5 SPECIAL MASTER GARRIE: Good morning, 09:21:08
6 Ms. Lee. My name is Special Master Daniel Garrie.
7 Every time I say that it sounds weird to me 'cause
8 at my own house, I'm a master of absolutely
9 nothing. But the point being is that hopefully
10 today -- I'm here representing the Court. 09:21:19
11 Hopefully you don't hear from me and you don't see
12 me. If I do unmute myself or turn my video on, it
13 is largely indicative of my desire to say
14 something, and other than that, I do appreciate you
15 taking the time today, and you are in more than -- 09:21:34
16 you are in very good hands, and I will turn it over
17 to counsel to walk you through the rest of the
18 rules and processes.
19 My only two questions to you are: Can
20 you see the Exhibit Share? 09:21:44
21 THE DEPONENT: Yes.
22 SPECIAL MASTER GARRIE: Okay. And do
23 you -- and your Internet seems more than
24 functionally fine, so I think I will turn it over
25 to counsel and let it all go. But thank you very 09:21:56

1 much. 09:22:00

2 THE VIDEOGRAPHER: Okay. Okay to do my

3 reading now?

4 Okay. We are on the record. It's

5 9:22 a.m. Pacific Time on May 19th, 2022. 09:22:08

6 This is the deposition of Amy Lee, and we

7 are here in the matter of Facebook Consumer Privacy

8 User Profile Litigation.

9 I'm John Macdonell, the videographer with

10 Veritext. 09:22:26

11 Before the reporter swears the witness,

12 would counsel please identify themselves, beginning

13 with the noticing attorney, please.

14 MS. WEAVER: Good morning, everybody.

15 I'm Lesley Weaver with Bleichmar Fonti & Auld on 09:22:35

16 behalf of the plaintiffs. With me today and

17 helping out is Matthew Melamed and also Anne Davis

18 of my firm. My co-counsel, Derek Loeser, and his

19 partner, David Ko, are also in attendance.

20 MR. DAVIS: Good morning. This is 09:22:55

21 Colin Davis of Gibson, Dunn & Crutcher on behalf of

22 Meta Platforms. Also appearing on behalf of Meta

23 are my colleagues Rose Ring, Austin Schwing,

24 Shaquille Grant, and Ian Chen of Meta Platforms.

25 SPECIAL MASTER GARRIE: Good morning. 09:23:13

1 For the record, my name is Special Master Garrie. 09:23:13
2 I'm here on behalf of the Court.
3 I will turn it back to the court reporter
4 to -- the videographer to move things forward.
5 THE COURT REPORTER: Okay. Ms. Ring, if 09:23:26
6 you could raise your -- oh, I'm sorry, Ms. Lee, if
7 you could raise your right hand for me, please.
8 THE DEPONENT: (Complies.)
9 THE COURT REPORTER: You do solemnly
10 state, under penalty of perjury, that the testimony 09:23:26
11 you are about to give in this deposition shall be
12 the truth, the whole truth and nothing but the
13 truth?
14 THE DEPONENT: Yes.
15 09:23:26
16
17
18
19
20 09:23:26
21
22
23
24
25 ///// 09:23:43

1 AMY LEE, 09:23:43
2 having been administered an oath, was examined and
3 testified as follows:
4
5 EXAMINATION 09:23:43
6 BY MS. WEAVER:
7 Q. Good morning, Ms. Lee. How are you?
8 A. Good.
9 Q. Good.
10 You have testified as a witness in this 09:23:51
11 case before, correct?
12 A. Yes.
13 Q. Okay. And I'm going to assume that you
14 understand the same rules apply as the last time
15 you were deposed; is that fair? 09:23:58
16 A. Yes.
17 Q. Okay. Meaning, we don't talk over each
18 other, et cetera.
19 You understand how a deposition is
20 conducted, correct? 09:24:07
21 A. Yes.
22 Q. Is there any reason that you can't
23 testify to the best of your ability today?
24 A. No.
25 Q. Okay. You understand that you're 09:24:14

testifying as the corporate representative for
Facebook on a -- topic ten pursuant to the notice
of deposition of Facebook under Rule 30(b)(6); is
that correct?

5 A. I don't know the number of the topic. 09:24:38

6 Q. Okay. Do you understand that you are to
7 testify today on behalf of Facebook regarding
8 Facebook's calculation of revenues, gross profits
9 and net profits recognized by Facebook relating to
10 user's data or information, including, but not 09:24:54
11 limited to, how Facebook monetized user data or
12 information, how Facebook quantified the value of
13 sharing user data or information, and Facebook's
14 business and marketing strategy regarding the
15 monetization and quantification of user data or 09:25:10
16 information?

17 A. Yes, that's right.

18 Q. Okay. Thank you.

19 And we received an email from your
20 counsel last night which attached a document. 09:25:20

21 Do you recall that document?

22 MR. DAVIS: Object to the form.

23 THE DEPONENT: I -- I don't recall an
24 attachment.

25	MS. WEAVER: Okay. Why don't we mark as	09:25:39
----	--	----------

1 exhibit -- 09:25:41

2 I'm sorry, Mr. Melamed, what exhibit

3 number is it? Three --

4 MR. MELAMED: 360.

5 MS. WEAVER: -- sixty -- tab 100 as 09:25:46

6 Exhibit 360.

7 (Exhibit 360 was marked for

8 identification by the court reporter and is

9 attached hereto.)

10 Q. (By Ms. Weaver) And you recall how 09:25:56

11 Exhibit Share works; is that right, Ms. Lee?

12 A. I believe so.

13 I have the window open now.

14 Q. Great.

15 MR. DAVIS: And, Ms. Lee, you may need to 09:26:06

16 refresh the window when a new exhibit is introduced

17 in order to see it.

18 MR. MELAMED: I will tell you -- I'm

19 sorry. It's just taking me a minute with the first

20 exhibit. I'll tell you when it's marked. 09:26:21

21 MR. DAVIS: Thank you, Mr. Melamed.

22 MR. MELAMED: All right. The exhibit has

23 been marked.

24 Q. (By Ms. Weaver) Let me know when you

25 have it, Ms. Lee. 09:27:02

1 A. Yes, I have it open. 09:27:07

2 Q. Okay. And what is this document?

3 A. This is a document that breaks down

4 Facebook revenue streams from the 2012-to-2017

5 period. 09:27:25

6 Q. And would it be possible for Facebook to

7 create a document reflecting revenue streams from

8 2017 to today?

9 A. 20- --

10 MR. DAVIS: Object to the form. 09:27:42

11 THE DEPONENT: It should be possible,

12 yes.

13 Q. (By Ms. Weaver) And do you have any idea

14 why that wasn't prepared for today?

15 MR. DAVIS: Object to the form. 09:27:51

16 THE DEPONENT: No.

17 Q. (By Ms. Weaver) Okay. And when you say

18 this reflects revenue streams, are there any

19 revenue streams that are excluded from presentation

20 of this document? 09:28:02

21 MR. DAVIS: Object to the form.

22 THE DEPONENT: Not for this time period.

23 Q. (By Ms. Weaver) And how did you decide

24 which revenue streams to include?

25 MR. DAVIS: Object to the form. 09:28:22

1 THE DEPONENT: I wasn't the -- I didn't 09:28:30
2 prepare this document, so I didn't make any
3 decisions about what to include or not.

4 Q. (By Ms. Weaver) I'm asking Facebook.

5 A. Uh-huh. 09:28:37

6 Q. What -- how did Facebook decide what
7 information to put on this document?

8 MR. DAVIS: Object to the form.

9 THE DEPONENT: Is your question about how
10 we arrived on these categories -- 09:28:57

11 MS. WEAVER: Yes.

12 THE DEPONENT: -- for the revenue
13 streams?

14 Generally speaking, these are large and
15 distinct channels that -- where we were accruing 09:29:18
16 revenue, and so I think these are just kind of
17 relatively intuitive breakdown of -- of the
18 different places that -- where -- where we were --
19 where we were generating revenue over this period.

20 Q. (By Ms. Weaver) And do you know who 09:29:42
21 actually prepared the document?

22 A. It was our finance team.

23 Q. And who, specifically, on the finance
24 team?

25 A. I believe her name is Laura -- 09:29:52

1 Lori Keller. 09:29:54

2 Q. And is this net or gross revenues?

3 MR. DAVIS: Object to the form.

4 THE DEPONENT: This should be gross

5 revenues. 09:30:16

6 Q. (By Ms. Weaver) And what -- what are the

7 source documents that were used to create this

8 document?

9 Strike that. Let me reask the question.

10 What were the sources of information that 09:30:27

11 were used to create this document?

12 A. This would have been produced using

13 sources from our finance team.

14 Q. Okay. But what sources in particular?

15 Are there data bases that track revenue for each of 09:30:46

16 these channels?

17 MR. DAVIS: Object to the form.

18 THE DEPONENT: Yes. There would be ways

19 we would have tracked revenues for each of these

20 channels, in- -- in- -- including databases. 09:31:05

21 Q. (By Ms. Weaver) And what are the

22 databases that store that information?

23 MR. DAVIS: Object to the form.

24 THE DEPONENT: Are you looking for names

25 of databases or? 09:31:18

1 MS. WEAVER: Yes. Let -- and I'll -- I 09:31:22
2 can be more specific. I'm not trying to trap you.
3 I'm literally trying understand where the data flow
4 comes from. Often, there are pipelines for
5 different kinds of direct sales, or pipelines 09:31:31
6 for -- I don't know -- ad networks. Maybe,
7 you know, in Oracle's Salesforce maintains revenues
8 for specific kinds of partnerships.
9 So I don't know -- this is a -- obviously
10 a roll-up, and I'm trying to understand where the 09:31:45
11 inputs that created this summary document exist --
12 THE DEPONENT: Yeah.
13 MS. WEAVER: -- and how this document was
14 created.
15 MR. DAVIS: Objection to the form of the 09:32:00
16 question.
17 Q. (By Ms. Weaver) So I can ask the
18 question again that's clearly --
19 A. I -- I -- I think I understand what your
20 question is. 09:32:11
21 The technology that our finance team has
22 used to track revenue from various sources over
23 time has evolved over time, to my understanding.
24 So I am not sure of the exact names of
25 databases or pipelines that were used to pull the 09:32:31

1 information for this time period. 09:32:36

2 Q. Okay. And it would be possible for
3 Facebook to create a similar document from 2007 to
4 2012 as well, wouldn't it?

5 MR. DAVIS: Object to the form. 09:32:48

6 THE DEPONENT: I would need to confirm
7 that.

8 MS. WEAVER: Okay.

9 THE DEPONENT: Find out.

10 MS. WEAVER: Yeah. 09:33:01

11 Q. (By Ms. Weaver) Is there some reason you
12 think it might not be possible for Facebook to
13 produce a document reflecting consolidated revenue
14 streams from 2007 to 2012?

15 A. It would depend on whether we -- we 09:33:14
16 retained data at this granularity going back this
17 number -- for -- going back further in time.

18 Q. Okay. And looking at the last two pages
19 of the document where it says "Product/Channel,"
20 "Also known as," and "Description," I be- -- you 09:33:36
21 may have answered this, but how were those
22 product/channels identified in order to create this
23 chart?

24 MR. DAVIS: Object to the form.

25 THE DEPONENT: Do you mean how did we get 09:34:01

1 the information that -- that -- that's in the 09:34:03
2 "Description" column?
3 MS. WEAVER: No. I mean actually
4 selecting the "Product/Channel" in the left-hand
5 column. 09:34:10
6 Q. (By Ms. Weaver) How did that occur?
7 MR. DAVIS: Object to the form.
8 THE DEPONENT: The products and channels
9 in this table align with the row headers that you
10 see in the financial tables on the -- on the 09:34:27
11 earlier pages.
12 So -- so, again, these represent the
13 relatively large and distinct sources of revenue,
14 over -- over this time period, as tracked by our
15 finance team. 09:34:45
16 Q. (By Ms. Weaver) And -- I think we'll get
17 into this a little bit later. Let's look at fiscal
18 year 2012.
19 What does "Marketplace Invoiced" mean?
20 A. "Marketplace Invoiced" represents revenue 09:35:05
21 that came from ads that were purchased via our
22 self-server ads platform and paid for via monthly
23 invoice.
24 Q. Purchased by whom? Are these part- --
25 Facebook partners? 09:35:28

1 MR. DAVIS: Object to the form. 09:35:29

2 THE DEPONENT: Purchased by Facebook
3 advertising partners.

4 Q. (By Ms. Weaver) Does that revenue
5 reflect only payments specifically for advertising, 09:35:37
6 or does it also reflect payment for conversions,
7 which are not necessarily advertising but could be
8 some other result that is set forth in the contract
9 with Facebook's partners?

10 MR. DAVIS: Object to the form. 09:35:54

11 THE DEPONENT: Did -- did -- did you say
12 it could -- did you ask if it could also represent
13 payment for con- -- conversions?

14 MS. WEAVER: Yes.

15 THE DEPONENT: It represents payments for 09:36:12
16 ads that ran on Facebook, and so I -- I -- I don't
17 quite understand the -- the question about
18 conversions. Yeah.

19 Q. (By Ms. Weaver) Okay. Does Facebook
20 receive payment from third parties who pay -- well, 09:36:35
21 strike that.

22 What is -- do you know what a
23 "conversion" is?

24 MR. DAVIS: Object to the form.

25 THE DEPONENT: I think it would depend on 09:36:47

Page 24

1 the context that the word is being used. 09:36:49

2 Q. (By Ms. Weaver) Okay. How about in the
3 context of Facebook selling ad slots to third
4 parties and third parties agreeing to pay only upon
5 a conversion or a specific event defined in a 09:37:02
6 contract; are you familiar with that?

7 MR. DAVIS: Object to the form.

8 THE DEPONENT: Are we still talking about
9 conversions that happen as a result of ads?

10 MS. WEAVER: It could be, or at all. 09:37:16

11 Q. (By Ms. Weaver) That's what I'm trying
12 to sort out, Ms. Lee, is: What are these pay- --
13 when you say "payment for ads," what do you mean?

14 A. I see.

15 So we make money based on ads and 09:37:25
16 specifically based on businesses running ads on our
17 platform, and the way -- and -- and -- and we have
18 many different ways that we may charge advertisers
19 to run these ads.

20 Q. And what are the ways that you charge 09:37:52
21 advertisers?

22 A. There are a few different ways, at a high
23 level, that -- that this -- this billing -- that we
24 do this billing.

25 One way is -- was referenced in this -- 09:38:21

1 in this "Marketplace Invoiced" line item, so if an 09:38:23
2 ad -- if an advertiser is buying ads via our
3 self-serve ads-buying interfaces, they have the
4 option, as -- as they set up an ad, to either
5 indicate whether they want to be billed per 09:38:41
6 impression, ad impression, or be billed on a
7 specific event.

8 And options over time for being billed on
9 an event, other than impressions, have included
10 link clicks, like clicks on a link, on an ad, and 09:39:01
11 video views, for example.

12 Q. Any other events that you can think of
13 for which Facebook has received payment?

14 MR. DAVIS: Object to the form.

15 THE DEPONENT: Another option over time 09:39:18
16 has been payment per app install.

17 Q. (By Ms. Weaver) Is there a name of a
18 specific program that you are aware of that was
19 payment per app install?

20 MR. DAVIS: Object to the form. 09:39:39

21 THE DEPONENT: When we talk about billing
22 for any event that is other than an impression or a
23 click, we sometimes use the term "CPA billing,"
24 which stands for "cost per action." And when
25 talking about billing for an app install, we often 09:40:03

1 use the term "CPA billing." 09:40:07

2 Q. (By Ms. Weaver) Are you familiar with a
3 program called [REDACTED]

4 A. No.

5 Q. Are you aware that [REDACTED] [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 [REDACTED]

09:40:31

11 MR. DAVIS: Object to form and scope.

12 THE DEPONENT: I think to -- I think I

13 heard you say there was the [REDACTED]

14 [REDACTED]

15 [REDACTED] but --

09:40:52

16 Q. (By Ms. Weaver) [REDACTED] It

17 was just -- I was responding to your testimony that

18 sometimes Facebook was paid for apps, [REDACTED]

19 [REDACTED]

20 Are you familiar with that program?

09:41:07

21 MR. DAVIS: Object to the form --

22 Just give me a moment to object, Ms. Lee.

23 Object to form and scope.

24 THE DEPONENT: [REDACTED]

25 [REDACTED]

09:41:22

Page 27

1 involving the -- the aspects you mentioned. 09:41:29

2 Q. (By Ms. Weaver) [REDACTED]

3 [REDACTED]

4 MR. DAVIS: Object to scope.

5 THE DEPONENT: [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 Q. (By Ms. Weaver) [REDACTED]

9 [REDACTED]

10 [REDACTED]

11 [REDACTED]

12 MR. DAVIS: Objection. Form and scope.

13 THE DEPONENT: I'm not able to confirm.

14 Q. (By Ms. Weaver) Do you know what "Neko
15 impressions" are? 09:42:18

16 A. "Neko" refers to ads that are meant to
17 drive mobile app installs, and "impressions" would
18 be referring to the number of times such ads were
19 shown to people using our platform.

20 Q. [REDACTED]

21 [REDACTED]

22 [REDACTED]

23 MR. DAVIS: Objection. Form and scope.

24 THE DEPONENT: [REDACTED]

25 [REDACTED]

09:43:00

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Q. (By Ms. Weaver) And did Facebook
calculate [REDACTED] in connection
with those agreements?

09:43:41

MR. DAVIS: Objection. Form.

THE DEPONENT: Are you referring to -- is
your question about whether [REDACTED]

[REDACTED]

MS. WEAVER: Yes.

09:44:06

THE DEPONENT: -- or -- okay.

MR. DAVIS: Object to the form.

THE DEPONENT: Not to my knowledge.

Q. (By Ms. Weaver) Did Facebook calculate
the [REDACTED]?

09:44:14

MR. DAVIS: Object to the form.

THE DEPONENT: Not to my knowledge.

MS. WEAVER: Could we mark tab 220 as
Exhibit 361, Matt.

/////

09:44:32

1 (Exhibit 361 was marked for 09:44:32
2 identification by the court reporter and is
3 attached hereto.)

4 Q. (By Ms. Weaver) And while we are waiting
5 it for a -- for it to load, do you have any reason 09:44:40
6 to think it's not [REDACTED]

7 [REDACTED]
8 MR. DAVIS: Object to the form.

9 THE DEPONENT: Just to clarify, is your
10 question about [REDACTED] 09:44:54

11 MS. WEAVER: Yes.

12 MR. DAVIS: Form.

13 MR. MELAMED: Exhibit 361 has been
14 introduced.

15 THE DEPONENT: I -- I don't know -- I 09:45:19
16 can't confirm whether it's possible, but I don't
17 think it's something we would be likely to do.

18 Q. (By Ms. Weaver) Okay. Looking at
19 Exhibit 361 -- let me know when you have it up.

20 A. Yes. 09:45:47

21 Q. Do you recognize Exhibit 361?

22 A. No.

23 Q. It was just produced to us about five
24 days ago, so I haven't had very much time with the
25 document, but it is labeled [REDACTED] 09:45:56

1 Are you familiar with [REDACTED] 09:46:02

2 MR. DAVIS: Object to the form.

3 THE DEPONENT: No.

4 Q. (By Ms. Weaver) And looking at the very

5 first page of the document, do you see where it 09:46:12

6 says, "... [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 A. I see that.

10 Q. Do you understand [REDACTED] [REDACTED]

11 [REDACTED]

12 MR. DAVIS: Objection. Form.

13 THE DEPONENT: I haven't seen that

14 acronym before, but [REDACTED] is a

15 reasonable guess at what it stands for. 09:46:50

16 Q. (By Ms. Weaver) And looking at the

17 second page of the document, do you see where it

18 says "[REDACTED]

19 A. I see that.

20 Q. And, then, in that column, it says "[REDACTED] [REDACTED]

21 [REDACTED] and in the second column, it says [REDACTED]

22 [REDACTED]

23 and three -- column 3 says [REDACTED]

24 [REDACTED]

25 Do you see that? 09:47:23

Page 31

1 A. Yes. 09:47:25

2 Q. Do you have an understanding of what that

3 row reflects?

4 MR. DAVIS: Object to the form.

5 THE DEPONENT: Well, it looks like it 09:48:00

6 specifically [REDACTED]

7 [REDACTED] I would,

8 again, be guessing at what [REDACTED] stands for.

9 Q. (By Ms. Weaver) Okay. Could you turn to

10 slide 17, please? 09:48:18

11 A. Yes.

12 Q. In this instance, do you see where it

13 says, "[REDACTED] [REDACTED]

14 [REDACTED]

15 [REDACTED] 09:48:41

16 Do you see that?

17 A. Yes.

18 Q. Do you have an understanding as to what

19 that means?

20 A. Not beyond sort of the content and the -- 09:49:36

21 the takeaway that's directly on this slide.

22 Q. Okay. And what is your understanding of

23 the content and takeaway that is on this slide

24 based on your experience working at Facebook?

25 A. The slide appears to be a breakdown of 09:50:06

1

2

3

4

5

Q. Okay. And the partnerships with

09:50:41

6

did they have an internal -- is there an

7

internal way to refer to those at Facebook?

8

MR. DAVIS: Ob- -- object to the form.

9

Scope.

10

THE DEPONENT: I don't know if there was

09:51:03

11

any other name or -- or term used apart from

12

13

Q. (By Ms. Weaver) Okay. And who was in

14

charge of

15

MR. DAVIS: Object to the form. Scope.

09:51:13

16

THE DEPONENT: I -- I don't know.

17

Q. (By Ms. Weaver) If I wanted to learn

18

more about who would I talk to or what

19

department should we look for people in?

20

MR. DAVIS: Object to the form and scope.

09:51:25

21

THE DEPONENT: The partnerships team may

22

have more information.

23

Q. (By Ms. Weaver) And who is on the

24

partnerships team?

25

MR. DAVIS: Object to the form. Scope.

09:51:42

Page 33

1 THE DEPONENT: One person I have worked 09:51:49
2 with in the past is Stephanie Wang.
3 Q. (By Ms. Weaver) Is that W-A-N-G?
4 A. Yes.
5 Q. And she's still with Facebook? 09:52:00
6 A. I believe so.
7 Q. Is there anybody who would have knowledge
8 prior to 2018?
9 MR. DAVIS: Object to the form.
10 THE DEPONENT: Not that I know of 09:52:17
11 offhand.
12 Q. (By Ms. Weaver) Okay. And looking at
13 this slide on slide 17 where it says "[REDACTED]
14 [REDACTED]" do you have an -- do
15 you have an understanding as to how that is 09:52:29
16 calculated here?
17 A. It seems to be calculated by taking
18 [REDACTED]
19 [REDACTED].
20 Q. And, in this instance, because we are 09:53:01
21 dealing with [REDACTED] does it seem likely that
22 they are calculating [REDACTED]
23 [REDACTED]
24 MR. DAVIS: Object to the form and scope.
25 THE DEPONENT: I wouldn't be able to 09:53:17

1 confirm that just from this slide. 09:53:19

2 Q. (By Ms. Weaver) Okay. Let's talk about
3 average revenue per user.

4 You are familiar with that calculation at
5 Facebook; is that right? 09:53:28

6 A. Yes.

7 MS. WEAVER: You can take the slide down,
8 Matt.

9 Q. (By Ms. Weaver) First of all, what is a
10 "user"? 09:53:36

11 A. In this context, in the context of
12 Facebook's financials, it is a person who -- it --
13 is visiting Facebook or Messenger and also logged
14 in to those services.

15 Q. So is a user someone who has agreed to 09:53:57
16 Facebook's terms of service?

17 MR. DAVIS: Object to the form. Scope.

18 THE DEPONENT: In setting up an account,
19 I believe a person has to agree to terms, so yes.

20 Q. (By Ms. Weaver) And I'm asking because, 09:54:22
21 to understand the calculation of average revenue
22 per user, I need to know whether it's somebody who
23 just appeared on a Facebook-owned-and-operated
24 site, or whether it is somebody who actually has
25 agreed to the terms of service and agreed to the 09:54:35

1 conduct, et cetera, that Facebook lays out in that 09:54:38
2 document.

3 So the question, again, is: When average
4 revenue per user is calculated in Facebook's
5 publicly recorded documents, are they counting, as 09:54:50
6 users, the people who agreed to the terms of
7 service?

8 MR. DAVIS: Objection. Scope.

9 THE DEPONENT: I'm hesitating because I
10 am trying to think about the -- how -- how terms 09:55:13
11 are presented to a person when they sign up for a
12 Facebook account. And it may be that when a person
13 signs up for the account, they need to either
14 act- -- I don't know whether they need to actively
15 attest to reviewing and seeing terms, or if they 09:55:36
16 sort of implicitly do so when they create an
17 account. That's why I'm hesitating.

18 But when -- when people sign up for an
19 account, they need to adhere to our terms of
20 service to be able to keep using the products, and 09:55:56
21 so users are based on logged-in people who are
22 using these services, so they are people who must
23 act in -- in -- in accordance with the terms.

24 Q. (By Ms. Weaver) And just inci- --
25 incidentally, do you know why Facebook refers to 09:56:14

1 | these people as "users" as opposed to "members"? | 09:56:16

2 MR. DAVIS: Objection. Scope.

3 THE DEPONENT: I do not.

4 Q. (By Ms. Weaver) So how does Facebook
5 calculate average revenue per user as reported in 09:56:32
6 its public-facing -- sorry, publicly filed
7 documents? By that I mean filed with the SEC.

8 A. It is based on revenue over a given
9 period divided by the average number of monthly
10 active users over that period. 09:56:55

11 MS. WEAVER: And can we mark as

12 Exhibit 20- -- or tab 201, please, as Exhibit 362.

13 (Exhibit 362 was marked for
14 identification by the court reporter and is
15 attached hereto.) 09:57:05

16 Q. (By Ms. Weaver) What are -- and while

17 it's loading, what are "monthly active users"?

18 A. This refers to people who have, either
19 over the past 30 days or a month -- I think it's 30
20 days -- who have visited Facebook or Messenger on a 09:57:22
21 logged-in basis.

22 Q. Visited the Facebook platform or Facebook
23 Messenger over the past 30 days?

24	A. Yes.
----	---------

25	Q. And when you say "visited," what do you	09:57:38
----	--	----------

1 mean? 09:57:41

2 A. Used the service.

3 Q. I'm going to try to be a little -- even

4 more specific.

5 Could they have just landed on the site 09:57:52

6 and not engaged in any conduct at all, meaning not

7 clicked on anything or not sent a message?

8 A. Yes.

9 Q. Okay. And what are "daily active users"?

10 A. These are people who have visited 09:58:12

11 Facebook or Messenger in a given day on a logged-in

12 basis.

13 Q. And it's the same definition for visited

14 that we just discussed for daily active users?

15 A. Correct. 09:58:31

16 Q. Is that right?

17 And why doesn't Facebook use the DAU

18 metric to calculate average revenue per user?

19 MR. DAVIS: Object to the form.

20 THE DEPONENT: We -- I don't -- we -- we 09:59:01

21 use DAU more as a metric to track overall

22 engagement with the platform.

23 Q. (By Ms. Weaver) And would you say -- oh,

24 I'm sorry --

25 A. That -- that's all. 09:59:30

1 Q. Would you say, in general, that daily 09:59:32
2 active users are engaged more frequently than
3 monthly active users on the platform?

4 MR. DAVIS: Object to the form.

5 Q. (By Ms. Weaver) By definition? 09:59:49

6 A. Daily active users and monthly active
7 users don't refer to different people necessarily.
8 It -- they are just two different metrics that
9 measure how many people use the platform over
10 different lengths of time. 10:00:12

11 Q. If you had one person -- if you take an
12 instance of two different people not being counted
13 twice and one person was only counted as a monthly
14 active user but not a daily active user and the
15 second person was a daily active user and, of 10:00:26
16 course, also a monthly active user, would it be
17 fair to say that the second person is engaging on
18 the platform more frequently than the person who is
19 only a monthly active user?

20 MR. DAVIS: Object to the form. 10:00:42

21 THE DEPONENT: So we don't identify
22 individuals as daily and/or monthly ac- -- active
23 users. The terms "daily active users" and "monthly
24 active users" are -- result from us counting the
25 total number of people who log on to the platform 10:01:04

1 in a given monthly period or -- or in a -- in a -- 10:01:08
2 or in a given day.

3 Q. (By Ms. Weaver) Does Facebook also track
4 metrics of user engagement?

5 MR. DAVIS: Object to the form. 10:01:19

6 THE DEPONENT: Yes.

7 Q. (By Ms. Weaver) And what are those
8 metrics?

9 A. The -- one of the most important ones --
10 one that we report on in our financials is daily 10:01:33
11 active users.

12 Q. Right.

13 In addition to daily active and monthly
14 active users, does Facebook track other metrics
15 that reflect user engagement on the platform, such 10:01:45
16 as clicks or views, for example?

17 MR. DAVIS: Object to the form.

18 THE DEPONENT: Yes.

19 Q. (By Ms. Weaver) And what are some of
20 those other metrics, in addition to clicks and 10:01:57
21 views, that Facebook tracks about the engagement of
22 users on its platform?

23 MR. DAVIS: Object to the form.

24 THE DEPONENT: There is -- because --
25 because there are many -- many different ways that 10:02:14

1 people can engage with content on the platform, 10:02:16
2 there are -- the list of -- of ways to engage is
3 very long. So it's difficult to describe the whole
4 list.

5 But even if you think of, you know, 10:02:28
6 what a typical person might engage with during a
7 typical visit to -- to Facebook, they might, as you
8 mentioned, click on content, like it, comment on
9 it, share it.

10 But, as I mentioned, there are many 10:02:47
11 different ways to -- to interact with -- with
12 different content on the platform that we would
13 measure separately, depending on the context.

14 Q. (By Ms. Weaver) And you mentioned
15 earlier that, for some of the activity you've 10:02:59
16 described in some contracts, Facebook actually
17 generates specific revenue for actions like clicks
18 and views; is that right?

19 MR. DAVIS: Object to the form.

20 THE DEPONENT: I believe I mentioned that 10:03:17
21 for ads specifically, for billing on ads. There
22 are a number of ways that advertisers can be
23 charged.

24 Q. (By Ms. Weaver) And why doesn't Facebook
25 report click revenue or ad revenue as opposed to 10:03:31

1 averaging revenue across monthly active users? 10:03:34

2 MR. DAVIS: Object to the form.

3 THE DEPONENT: I imagine that, you know,

4 in our -- in our SEC filings, we provide the

5 information that we believe is most important for 10:04:10

6 investors to understand about our business, and

7 providing a breakdown of ads revenue specifically,

8 that's, you know, so granular as to break it down

9 by the source of the billing event. I'm -- I'm not

10 sure that's important for most investors to know 10:04:31

11 with respect to future growth of our business.

12 Q. (By Ms. Weaver) So in Facebook's view,

13 it is a sufficient metric to report to investors

14 the average amount of revenue calculated per user

15 rather than providing individual granulated 10:04:51

16 information about the revenue generated from each

17 individual user; is that correct?

18 MR. DAVIS: Object to the form.

19 THE DEPONENT: Yes. I think it's -- it's

20 more pertinent to disclose the total revenue arm we 10:05:12

21 are making and the total number of users we see

22 over time than it is to describe individual

23 revenue, new amounts for individual users.

24 MS. WEAVER: Great.

25 And if -- can you take a look at 10:05:31

1 Exhibit 362. I think it's been loaded now. 10:05:33

2 THE DEPONENT: Yes.

3 MS. WEAVER: And while you're pulling it
4 up, I will state for the record: Counsel created
5 this document based on the SEC filings reflecting 10:05:40
6 the DAU and MAU, and I'm not asking you to attest
7 to the accuracy specifically.

8 But looking at exhibit -- strike that.
9 Let me know when you've had a moment to look at it.

10 MR. DAVIS: And while the witness is 10:06:04
11 looking at the document, I'm sure that counsel
12 agreed to this in -- in good faith, and it is
13 intended to be accurate, but we'll just state a
14 standing objection to the accuracy of the document
15 to the extent that we don't have the underlying SEC 10:06:15
16 filings as exhibits.

17 MS. WEAVER: No problem. Fair enough.

18 THE DEPONENT: Okay. I have reviewed it.

19 Q. (By Ms. Weaver) Do you know whether or
20 not Facebook reported MAU or DAU prior to 2009? 10:06:55

21 MR. DAVIS: Object to the form.

22 THE DEPONENT: I can't say for certain.

23 Q. (By Ms. Weaver) Does -- did Facebook
24 track MAU and DAU prior to 2009?

25 A. Most likely, yes. 10:07:26

1 Q. And Facebook possesses documents that 10:07:27
2 reflect DAU and MAU prior to 2009, in your
3 understanding?

4 MR. DAVIS: Object to the form.

5 THE DEPONENT: I am not sure if we have 10:07:42
6 retained them.

7 Q. (By Ms. Weaver) Okay. Let's assume for
8 a moment Facebook didn't retain them.

9 Would you agree that a methodology for
10 extrapolating DAU and MAU for 2007 and 2008 might 10:07:52
11 better -- might then be appropriate?

12 MR. DAVIS: Object to the form. Scope.

13 THE DEPONENT: It would be possible to
14 make assumptions to extrapolate the data.

15 MS. WEAVER: Okay. Thank you. 10:08:15

16 And we can put this down.

17 Q. (By Ms. Weaver) Does Facebook -- well,
18 strike that.

19 Are you familiar with an expression
20 called "churn"? 10:08:25

21 A. Yes.

22 Q. What is "churn," in general?

23 A. In the -- in the context of Facebook
24 users, it would refer to people who once used the
25 platform but who longer use the platform. 10:08:40

1 Q. And does Facebook maintain records of 10:08:42
2 churn?

3 A. We measure it. I'm not sure how long we
4 keep records.

5 Q. Why do you measure it? 10:08:59

6 A. Because we measure how many users --
7 people are using our platform in any given period,
8 we can see differences in one period versus the
9 next, so if there's a reduction, then we have a way
10 to measure churn. 10:09:21

11 Q. And it would -- well, in calculating
12 ARPU, does Facebook account for churn?

13 MR. DAVIS: Object to the form.

14 THE DEPONENT: Can you clarify what you
15 mean by "account for"? 10:09:41

16 MS. WEAVER: Yeah.

17 Q. (By Ms. Weaver) ARPU -- by the way, is
18 it -- do you say "A-R-P-U"?

19 A. Yeah.

20 Q. Okay. It's not "ARPU," or something like 10:09:54
21 that?

22 A. I have heard people say both.

23 Q. Okay. All right. Just didn't want to be
24 the only one out there.

25 ARPU is calculated by looking at the 10:10:06

1 monthly average users and dividing that into annual 10:10:08
2 revenue; isn't that right?

3 A. It would be revenue over a given time
4 period -- so it could be a quarter -- divided by
5 average monthly active users over that time period. 10:10:24
6 So for MAU, for example, if you had -- if you were
7 looking at a quarter of revenue, then you would
8 take an average of MAU for the three-quarters over
9 that period --

10 Q. The other -- 10:10:39

11 A. -- the three months' period.

12 Q. Apologies.

13 Are there documents that reflect those
14 actual granular calculations at Facebook?

15 A. The finance team should have 10:11:12
16 documentation that backs up the calculation of
17 these reported numbers.

18 MS. WEAVER: And let's take a look at --
19 it should be up.

20 Matt, can you mark tab 202, or maybe you 10:11:41
21 already did -- oh, yeah, it's there, Exhibit 363.

22 (Exhibit 363 was marked for
23 identification by the court reporter and is
24 attached hereto.)

25 THE DEPONENT: Yes, I have it open. 10:11:57

1 Q. (By Ms. Weaver) And, again, 3- -- 10:11:59
2 Exhibit 363, like Exhibit 362, was created by
3 counsel in this case and pulled from Facebook's SEC
4 filings.

5 Take a moment to review and just let me 10:12:11
6 know when you are ready to discuss.

7 MR. DAVIS: And we'll just state the same
8 standing objection again: Assume this was created
9 accurately, but given that we don't have the
10 underlying documents as exhibits, we'll object to 10:12:23
11 the accuracy of the document.

12 MS. WEAVER: Understood.

13 THE DEPONENT: Okay. I've reviewed it.

14 Q. (By Ms. Weaver) And do you understand
15 that Facebook reports the ARPU not just by 10:13:54
16 worldwide but also by country?

17 MR. DAVIS: Object to the form.

18 THE DEPONENT: I think what I have seen
19 in the financials is the reporting on worldwide as
20 well as four regions. 10:14:15

21 Q. (By Ms. Weaver) And what are those
22 regions?

23 A. U- -- if I recall correctly US and
24 Canada, Europe, Asia, and rest of world.

25 Q. And so just to be clear, in calculating 10:14:35

1 ARPU for US and Canada, does Facebook perform that 10:14:38
2 calculation by adding MAU in Canada and US and
3 dividing that into the revenues from those
4 countries?

5 MR. DAVIS: Object to the form. 10:14:52

6 THE DEPONENT: Right. The calculation
7 should be revenue from those countries divided by
8 average MAU from those countries.

9 Q. (By Ms. Weaver) This is -- I'm not
10 asking a very good question. 10:15:19

11 One might imagine a world where ARPU, if
12 you calculated it only in the United States, was
13 higher per MAU than, for example, in Canada alone.

14 So in reporting this combined number, are
15 they first calculating ARPU for the US and then 10:15:41
16 calculating ARPU for Canada and then adding them?
17 Or is it all ARPU that -- sorry, all MAU for Canada
18 and the US together divided by the total amount of
19 revenue?

20 MR. DAVIS: Object to the form. 10:16:00

21 THE DEPONENT: I believe it's looking at
22 the geography holistically, so average revenue for
23 the entire geography divided by average MAU for the
24 entire geography.

25 Q. (By Ms. Weaver) And so if one wanted to 10:16:18

1 figure out ARPU for MAU in the US, what is the best 10:16:20
2 way to do that?

3 MR. DAVIS: Object to the form.

4 THE DEPONENT: The best way to do that if
5 we were -- wanted to look at it internally would be 10:16:42
6 to take ad revenues in the US divided by average
7 monthly active users in the US.

8 Q. (By Ms. Weaver) And Facebook has records
9 that reflects that information, correct?

10 MR. DAVIS: Object to the form. 10:17:01

11 THE DEPONENT: Yes.

12 Q. (By Ms. Weaver) And that's not publicly
13 reported, right?

14 A. Not to my understanding.

15 Q. When you say "ads revenue," has the 10:17:16
16 definition of the ads revenue used to calculate
17 ARPU changed over time?

18 A. Let me -- actually, I'm sorry. I should
19 revisit my statement. I was referring to ads
20 revenue, but when we do these ARPU calculations 10:17:32
21 overall, it's total revenue. It's not just -- it's
22 not only ads revenue.

23 Q. Thank you.

24 And what are the components of total
25 revenue used to calculate ARPU? And I would like 10:17:42

1 you to answer, if you can, for -- from 2007 to the 10:17:46
2 present, understanding that you may have different
3 answers for different time periods?

4 MR. DAVIS: Object to the form.

5 Go ahead. 10:17:57

6 THE DEPONENT: For -- so -- so the -- the
7 numerator in -- in the calculation would be total
8 revenue, and so for 2012 through 2017, total
9 revenue was -- and -- and the sources compromising
10 total revenue were laid out in the exhibit we -- we 10:18:17
11 spoke about earlier.

12 Q. (By Ms. Weaver) In the -- Exhibit 360?

13 A. Yes.

14 Q. Okay. And what about 2017 to the
15 present? 10:18:34

16 A. From 2017 through present, there may have
17 been line items added and some -- some removed
18 versus the period before that, but across the whole
19 time, from 2012 onwards, the -- the large majority
20 of our revenue was -- was coming from ads -- has 10:18:59
21 been coming from ads, and -- and so that remains
22 consist throughout the present.

23 Q. And what about the period for 2007 to
24 2012?

25 A. The majority of our revenue would have 10:19:16

```
1 | come from ads over that time period as well. 10:19:19
```

2 Q. And when you say "ads," just for the
3 record, what do you mean?

4	A. Revenue that came from businesses paying	
5	to show ads on Facebook.	10:19:36

6 Q. So looking at Exhibit 360, would you
7 please identify the revenue streams you were
8 referring to when you say "ads"?

9	A. Yes. 360.
---	--------------

10 Okay. So revenue streams that would 10:19:57
11 factor into advertising revenue would be -- would
12 encompass agency discount, audience network -
13 contra, credit card ads, insertion orders. I think
14 marketing services - other is included here.

15 Marketplace invoiced and reseller rebates. Those 10:20:39
16 should be the -- the main categories. I think I --
17 I think I captured all of them.

18	Q. Thank you.
----	---------------

19	What is "insert order"?
----	-------------------------

20	A. "Insertion order."	10:21:03
----	-----------------------	----------

21	Q. Sorry.
----	-----------

22 | A. Or "IO," it's sometime abbreviated here.

23 It's a contract that we enter into with a business
24 whose -- advertising partner where we agree to --

25	they agree to pay for a fixed number of ads for a	10:21:21
----	---	----------

1 certain price. 10:21:27

2 Q. And what is the difference between
3 insertion orders, hyphen, direct orders, and
4 insertion orders ISO?

5 A. Direct sales and ISO, over this time 10:21:41
6 period, referred to different organizations within
7 our sales org that were mapped to different
8 advertising groups -- different groups of -- of
9 advertising clients.

10 Q. What is "direct sales"? 10:22:00

11 A. "Direct sales" would have represented our
12 sales team mapped to some of our largest
13 advertising partners.

14 Q. Can you give an example of some of those
15 partners? 10:22:16

16 MR. DAVIS: Object to the form.

17 THE DEPONENT: You can think of the,
18 you know, largest advertising spenders globally,
19 like Procter & Gamble or Unilever.

20 Q. (By Ms. Weaver) And then "ISO," 10:22:34
21 what's -- what is "ISO," and what does it stand
22 for? Did you tell me?

23 A. ISO stands for "inside sales
24 organization." So, again, it is a different --
25 kind of a sister organization to direct -- the 10:22:48

1 direct sales org in our larger sales team, and my 10:22:53
2 understanding is that during this time period,
3 ISO, that team supported advertisers kind of in
4 that -- that next tier, so oftentimes smaller
5 businesses with, you know, smaller levels of total 10:23:11
6 advertising spend or advertising and marketing
7 resources.

8 Q. And it was phased out after 2012; is that
9 right?

10 A. We continued to have -- we continued to 10:23:43
11 have teams in -- in some degree of segmentation
12 in our -- in our sales org, but after 2012,
13 according to this document, we were not tracking
14 insertion-order revenue separately for -- for
15 that -- that sales group. 10:24:05

16 Q. Okay. I'm just going to -- so there
17 exists -- in order to create this document, there
18 are underlying supported documents that reflects
19 the revenues for all of these different revenue
20 streams, correct? 10:24:21

21 MR. DAVIS: Object to the form.

22 THE DEPONENT: Documents or databases
23 that track the revenue, yes.

24 MS. WEAVER: Okay. Well, we are going to
25 request production of those, and I won't waste your 10:24:35

1 time asking you questions about things you don't 10:24:37
2 know because I can't put the documents in front of
3 me.

4 Q. (By Ms. Weaver) But let me ask really
5 quickly: What is Karma -- 10:24:44

6 A. Yeah.

7 Q. -- generally, as reflected on this sheet?

8 A. It was a gift-giving service that we
9 acquired and later sunset.

10 Q. And what is "agency discount"? 10:24:59

11 A. "Agency discount" refers to rebates we
12 paid to some ads agencies to incentivize
13 advertising on Facebook.

14 MS. WEAVER: Understood. Okay.

15 Let's mark tab 673, please, and this will 10:25:28
16 be Exhibit 364.

17 (Exhibit 364 was marked for
18 identification by the court reporter and is
19 attached hereto.)

20 MR. DAVIS: And, Ms. Weaver after the -- 10:25:36
21 this exhibit, can we take a short break, please.

22 MS. WEAVER: Yes.

23 MR. MELAMED: The exhibit has been
24 introduced.

25 MS. WEAVER: And for the record, 10:26:02

1 Exhibit 63 [sic] bears Bates Nos. EY-FB-0002851 10:26:02
2 [sic] through -881. And it was not produced by
3 Facebook. It was produced by Ernst & Young.
4 Q. (By Ms. Weaver) Do you know who
5 Facebook's auditors are, Ms. Lee? 10:26:19
6 MR. DAVIS: Object to the form.
7 THE DEPONENT: Not offhand.
8 Q. (By Ms. Weaver) Okay. Well, I'll tell
9 you that they're Ernst & Young that has publicly
10 reported. That's where we got this document. 10:26:29
11 Are you familiar with revenue review?
12 A. No.
13 Q. We didn't receive revenue doc- --
14 documents from Facebook yet, other than we
15 received, I think, one from 2013 five days ago. 10:26:45
16 Are you aware of a team that engages in a
17 revenue review?
18 MR. DAVIS: Object to the form.
19 THE DEPONENT: If this document was from
20 Ernst & Young, I assume they would engage with our 10:27:08
21 finance team in connection with this document.
22 Q. (By Ms. Weaver) Okay. Have you seen a
23 document like this before?
24 A. The -- I can't recall if I have seen a
25 specific document, but the -- the concepts in -- in 10:27:39

1 this document are familiar to me. 10:27:44

2 Q. And what specific contents -- concepts
3 are you referring to when you say that?

4 A. This looks like a -- a summary of revenue
5 over a given quarter, an assessment of drivers for 10:28:06

6 some of the revenue results and projections for
7 future revenue. And so, as an ads business, this
8 is something that leadership teams often --

9 these -- these types of things are -- are -- are --
10 are things that leadership teams often look at 10:28:40
11 that.

12 Q. And when they are looking at them, are
13 they circulated on a regular basis, weekly or
14 monthly?

15 MR. DAVIS: Object to the form. 10:28:49

16 THE DEPONENT: I think it would depend on
17 the specific document. This -- this particular
18 document would be -- is a -- it seems to be a
19 quarterly look-back, so the discussion about it
20 would likely be quarterly. 10:29:11

21 Q. (By Ms. Weaver) And is there a team, in
22 general, that's responsible for tracking Facebook's
23 revenues on a regular basis?

24 MR. DAVIS: Object to the form.

25 THE DEPONENT: Different teams would be 10:29:31

1 responsible, depending on the context, the need for 10:29:33
2 the -- the -- the tracking.

3 Q. (By Ms. Weaver) And what teams are you
4 thinking of?

5 A. Sales teams need to track revenues to 10:29:50
6 understand sales quota achievements. So spe- --
7 specific teams would work on that. Finance teams
8 would need to track progress for financial
9 reporting. So different -- different teams would
10 need to work on that. 10:30:09

11 Q. And in preparing for your deposition
12 today, did you speak with any members of revenue
13 teams or teams that are involved in Facebook's
14 calculation of revenues?

15 A. Yes. 10:30:21

16 Q. Who did you speak with?

17 A. Bonnie Ng, N-G, and
18 Seethalakshmi Sethuraman.

19 I can spell it if it's helpful.

20 Q. Yeah, that would be great for the court 10:30:37
21 reporter, and Rebecca is shaking her head.

22 A. First name is S-E-E-T-H-A-L-A-K-S-H-M-I.
23 Last name is S-E-T-H-U-R-A-M-A-N.

24 Q. And what is her role?

25 A. Seetha's role is -- she works on 10:31:08

1 accounting policy. 10:31:11

2 Q. And what is "accounting policy"?

3 A. I understand it is -- relates to what --

4 how we are allowed to -- or what revenue we were

5 actually allowed to book as -- as revenue in our 10:31:33

6 systems.

7 Q. And what did she tell you about what

8 revenue Facebook is allowed to book?

9 A. She shared a lot of quite technical

10 details and kind of decision points that inform 10:31:50

11 what our accounting team is -- is able to book.

12 Q. And what, specifically, about what

13 revenue Facebook is able to book did you discuss

14 with her relevant to this deposition?

15 A. I was looking to get an understanding -- 10:32:15

16 just a deeper understanding of the process and --

17 because that is an area where I previously had less

18 context, and so hearing her walk through some of

19 the considerations was -- was helpful.

20 Q. And what specific considerations? 10:32:40

21 A. My main takeaway from -- from our

22 conversation was that there's a quite complex

23 process that leads to the final amount of revenue

24 that we are actually able to put on the books.

25 Q. And how long did you speak with her? 10:33:21

1 A. I had about a half-hour conversation with 10:33:27
2 her and Bonnie.
3 Q. So you spoke with them at the same time?
4 A. That's right.
5 Q. Okay. And what is Bonnie's title? 10:33:35
6 A. I can't recall her title, her exact
7 title --
8 Q. Her role --
9 A. -- offhand --
10 Q. Sorry. 10:33:47
11 A. Exactly, or -- or role. But she also
12 works on our finance team -- on our accounting
13 team.
14 Q. There's a difference between the finance
15 and accounting team; is that right? 10:33:57
16 A. I understand that accounting is one part
17 of the broader finance team.
18 Q. Who is on the finance team?
19 MR. DAVIS: Object to the form.
20 THE DEPONENT: It's quite a large team. 10:34:11
21 I don't know if you are looking for a -- can you --
22 I can't describe every person on the team.
23 Q. (By Ms. Weaver) That's fine.
24 When I ask you questions, I'm not asking
25 for the name -- like that, the name of everybody 10:34:27

1 but, you know, who leads the team and, in general, 10:34:29
2 how is it structured and who is on it?
3 MR. DAVIS: Object to the form.
4 But go ahead.
5 THE DEPONENT: The -- our chief financial 10:34:38
6 officer is David Wehner. So he leads the team, and
7 I -- I'm not closely familiar with the structure
8 of -- the organizational structure of the finance
9 team.
10 Q. (By Ms. Weaver) How many people are on 10:34:53
11 the team?
12 MR. DAVIS: Object to the form.
13 THE DEPONENT: I don't know offhand.
14 Q. (By Ms. Weaver) Can you name anybody
15 else on the finance team other than David Wehner? 10:35:02
16 A. Yes. Sam Mincer is someone I have worked
17 with.
18 Q. What's his role?
19 A. I'm not sure of his exact title or role,
20 but he has worked with us on ads product work in 10:35:28
21 the past.
22 Q. Other than Seetha and Bonnie, did you
23 speak with anybody else to prepare for your
24 deposition today who is not a lawyer?
25 A. Yes. 10:35:40

1 Q. Who? 10:35:41

2 A. Justin Osofsky.

3 Q. Is he on the finance team?

4 A. No.

5 Q. And how long did you speak with 10:35:49

6 Mr. Osofsky?

7 A. About 10 or 15 minutes.

8 Q. Okay. And what did you discuss?

9 A. We discussed some of his previous work on

10 Facebook platform. 10:36:06

11 Q. And what specific work did you discuss?

12 A. It related to previous -- previous

13 discussions about options we were considering with

14 respect to developer APIs.

15 Q. And what options was Facebook considering 10:36:39

16 with regard to developer APIs that you discussed

17 with Mr. Osofsky?

18 A. We discussed the idea of [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

22 Q. Anything else?

23 A. Those are the specific examples that come

24 to mind.

25 Q. And did Facebook execute on creating a 10:37:25

1 [REDACTED] 10:37:33

2 MR. DAVIS: Object to the form. Scope.

3 THE DEPONENT: No.

4 Q. (By Ms. Weaver) And why not?

5 MR. DAVIS: Object to the form. Scope. 10:37:46

6 THE DEPONENT: The idea had come up in

7 discussions around sustainable business models to

8 help fuel the growth of our business, and we did

9 not proceed with that option because there were

10 better options for us to pursue instead. 10:38:16

11 Q. (By Ms. Weaver) Was there a problem with

12 the [REDACTED] that you thought

13 would make it not sustainable? And I mean

14 Facebook.

15 MR. DAVIS: Object to the form. Scope. 10:38:29

16 THE DEPONENT: I don't know if it was

17 a -- a problem per se. But we -- I think the

18 reason we didn't proceed with that is because there

19 were better options.

20 Q. (By Ms. Weaver) Why were other options 10:38:47

21 better?

22 A. We felt there was more opportunity to be

23 had in the other options, and they would be more

24 aligned with our core business, which is

25 advertising. 10:39:14

1 Q. Okay. We'll come back to that. But I 10:39:16
2 would just say, in general, I feel like I'm asking
3 for facts and getting conclusions, and what I'm
4 trying to understand is the reason that you
5 concluded that there were better strategies or 10:39:25
6 better options.

7 What were the reasons -- what was the
8 reason that [REDACTED] was not aligned and was not
9 a good choice for Facebook?

10 MR. DAVIS: Object to the form. 10:39:38

11 THE DEPONENT: It's -- it's -- it's a bit
12 hard to answer that because I think everything we
13 do when we consider where to apply our resources,
14 you know, for the -- for a large percent of the
15 time, it comes down to prioritization. We have 10:40:10
16 a finite number resources and a finite number of
17 opportunities we can pursue, and we try to make
18 sure that things fall below the line so we are not
19 trying to do everything.

20 And so I think, you know, at the time, we 10:40:29
21 had a very robust ad -- ads business, and we had a
22 very promising avenue to grow our mobile app
23 install ads business and to also pursue other
24 options. A lot of other options would have taken
25 away resources from the things that we felt would 10:40:49

1 be the most valuable avenues. So it's not 10:40:52
2 necessarily flaws of the options we didn't pursue.
3 It is that we wanted to make sure we had the right
4 investments in the things we wanted to pursue more.

5 Q. (By Ms. Weaver) So, at the time, did 10:41:07
6 Facebook decide to pursue mobile app installs
7 instead of a [REDACTED]?

8 MR. DAVIS: Object to the form. Scope.

9 THE DEPONENT: We decided that continuing
10 to focus the majority of our investment on 10:41:25
11 advertising was the best path.

12 Q. (By Ms. Weaver) And you were
13 distinguishing advertising from a [REDACTED]; is
14 that right?

15 MR. DAVIS: Object to the form. 10:41:43

16 THE DEPONENT: Yes.

17 Q. (By Ms. Weaver) And what would you
18 describe is the product inherent in a [REDACTED]?

19 MR. DAVIS: Object to the form.

20 THE DEPONENT: I don't know if there are 10:42:11
21 things that are inherent in a [REDACTED] but I
22 know that some of things under discussion were
23 specifically [REDACTED]

[REDACTED]

[REDACTED]

10:42:31

1 Q. (By Ms. Weaver) And what kinds of 10:42:33
2 information was that?

3 MR. DAVIS: Object to the form. Scope.

4 THE DEPONENT: Some examples I recall
5 were around [REDACTED] [REDACTED]
6 [REDACTED]
7 [REDACTED]

8 Another thing under consideration was
9 something we referred to as "[REDACTED]"
10 [REDACTED]
11 [REDACTED]

12 [REDACTED] 10:43:12

11 Q. (By Ms. Weaver) The Kevin Bacon
12 standard?

13 MR. DAVIS: Object to the form.

14 Q. (By Ms. Weaver) Okay. Any other kinds
15 of information that were considered sharing in the 10:43:27
16 [REDACTED]

17 A. There was a long list of -- of ideas that
18 were considered. Those are the two that come to
19 mind, but hard to be comprehensive about every idea
20 that was on the table. 10:43:44

21 Q. Okay. And, then, you also mentioned
22 [REDACTED] as a product that was not pursued; is that
23 correct?

24 A. I understand there was some beta testing
25 done for a -- a product, but not -- not something 10:43:57

1 that was ever broadly launched. 10:44:00

2 Q. And what did the beta testing involve?

3 MR. DAVIS: Object to the form. Scope.

4 THE DEPONENT: There was a test with some
5 news and publishing partners that I understand that 10:44:21
6 was -- re- -- related to [REDACTED]

7 [REDACTED].

8 Q. (By Ms. Weaver) And, ultimately,
9 Facebook decided not to pursue [REDACTED] is that
10 right? 10:44:43

11 A. Yes.

12 Q. Why?

13 MR. DAVIS: Object to the form. Scope.

14 THE DEPONENT: I don't know for certain,
15 but I presume we concluded there wasn't enough 10:44:57
16 business opportunity in that area.

17 Q. (By Ms. Weaver) And were revenue
18 calculations or estimations performed as part of
19 the decision of whether or not to pursue [REDACTED]

20 [REDACTED] 10:45:11

21 MR. DAVIS: Object to the form.

22 THE DEPONENT: It came up in the [REDACTED]

23 [REDACTED] I'm not sure if it came up in the
24 [REDACTED].

25 Q. (By Ms. Weaver) And when you say "it 10:45:28

1 came up," what do you mean? 10:45:29

2 A. I believe there were some projections or
3 estimates that our teams attempted to make to
4 describe the revenue opportunity from offering
5 different types of [REDACTED] 10:45:48

6 Q. Do you know who prepared those
7 presentations?

8 MR. DAVIS: Object to the form.

9 THE DEPONENT: I don't know specific
10 names of people who prepared the presentations. 10:46:03

11 Q. (By Ms. Weaver) Do you know the teams?

12 MR. DAVIS: Object to the form.

13 THE DEPONENT: It would have been a
14 platform team.

15 Q. (By Ms. Weaver) And who was on the 10:46:21
16 platform team?

17 MR. DAVIS: Object to the form.

18 THE DEPONENT: Justin Osofsky would have
19 been one person.

20 Q. (By Ms. Weaver) And you reviewed some of 10:46:30
21 those projections to prepare for your deposition
22 today; is that right?

23 MR. DAVIS: Object to the form.

24 THE DEPONENT: Yes.

25 Q. (By Ms. Weaver) And what do you recall 10:46:41

1 about those presentations? 10:46:41

2 A. I recall seeing discussion of many
3 options relating to opportunities -- potential
4 opportunities with app developers, most of which we
5 did not proceed with. 10:47:12

6 Q. And did reviewing the document refresh
7 your recollection about that topic?

8 MR. DAVIS: Object to the form.

9 Q. (By Ms. Weaver) Or educate you?

10 A. It both reflec- -- refreshed my 10:47:24
11 recollection and -- about some and educated me
12 about others.

13 MS. WEAVER: Thank you.

14 To the extent that hasn't been identified
15 or produced, we would like to get that. 10:47:34

16 Okay. I think we can take a break now if
17 you want. We are in the middle of this document,
18 but I'm okay with that if you would like to break,
19 Ms. Lee, or we can continue?

20 MR. DAVIS: I -- I can't speak for the 10:47:46
21 witness, but I would really like a break.

22 MS. WEAVER: That's fine. We can go off
23 the record.

24 THE VIDEOGRAPHER: Okay. We are off the
25 record. It's 10:47 a.m. 10:47:54

1 (Recess taken.) 10:47:57

2 THE VIDEOGRAPHER: We are back on the

3 record. It's 10:58 a.m.

4 Q. (By Ms. Weaver) And looking at

5 Exhibit 363, do you understand that it was -- it's 10:58:34

6 an internal document prepared by Facebook?

7 A. I haven't seen the document before, but

8 if -- I -- so I -- but I believe if you say it's

9 been prepared by Facebook.

10 Q. Do you have any reason to think it wasn't 10:59:05

11 prepared by Facebook?

12 A. No.

13 Q. Okay. Looking -- well, let's turn to

14 page ending -- I think you know about Bates

15 numbers, right, the little numbers on the lower 10:59:15

16 right-hand corner of the page?

17 A. Yes.

18 Q. Okay. So could you turn, please, to the

19 Bates number ending -856, and it says "Q1'18

20 Verticals and Objectives" on it. 10:59:28

21 A. Sorry. We are talking about which

22 exhibit?

23 Q. Still on Exhibit 363.

24 A. Uh-huh.

25 Q. And it's the page ending at -856, and now 10:59:36

1 it's on the screen. 10:59:39

2 MR. DAVIS: Ms. Weaver, I think the

3 witness's confusion may be that this is

4 Exhibit 364.

5 MS. WEAVER: Oh, well, that would be the 10:59:46

6 source of confusion, and I apologize.

7 THE DEPONENT: Could -- could you --

8 MS. WEAVER: Yes.

9 THE DEPONENT: Okay. Could you read that

10 number? 10:59:57

11 MS. WEAVER: Sure. It's -856.

12 THE DEPONENT: Yes, I have it.

13 MS. WEAVER: Okay. Great.

14 Q. (By Ms. Weaver) Do you know what a

15 "vertical" is? 11:00:08

16 A. Yes.

17 Q. What is "vertical"?

18 A. Here, it represents a category of a given

19 advertising client -- the business category of a

20 advertising client. 11:00:23

21 Q. Does "vertical" have another meaning at

22 Facebook?

23 MR. DAVIS: Object to the form.

24 THE DEPONENT: That, generally, is the

25 most common meaning we would use at Facebook within 11:00:42

1 the ad's business. 11:00:46

2 Q. (By Ms. Weaver) Does Facebook sometimes
3 refer to categories that users are put into for
4 advertising purposes as "verticals"?

5 MR. DAVIS: Object to the form. 11:00:54

6 THE DEPONENT: We -- we refer to the
7 business type of a given advertiser -- we often
8 refer to that as the vertical that an advertiser
9 might be in.

10 Q. (By Ms. Weaver) Okay. Is that the same 11:01:18
11 as what's on this page?

12 Let me ask a better question.

13 So is that definition of "vertical"
14 consistent with the use of the word "vertical" on
15 this page, to the best of your understanding? 11:01:32

16 A. Yes.

17 Q. Okay. And turning to the next page,
18 ending at -857 --

19 A. Yes.

20 Q. -- do you see where it says, "Q1'18 Top 11:01:46
21 Advertisers"?

22 A. Yes.

23 Q. And do you see that, for example,
24 Procter & Gamble and Unilever are listed there,
25 correct? 11:01:57

1	A. Yes.	11:01:57
---	---------	----------

2 Q. And, earlier, you testified, I believe,
3 that Unilever and Procter & Gamble have been
4 referred to as part of the direct sales revenue; is
5 that right? 11:02:14

6 MR. DAVIS: Object to the form.

7 THE DEPONENT: I believe I referred to
8 one part of our sales organization as the direct
9 sales organization, and that team supported
10 advertisers -- that team supported some of our 11:02:34
11 larger advertisers, like Procter & Gamble and
12 Unilever.

13 Q. (By Ms. Weaver) Okay. So is it your
14 understanding that direct sales also supports
15 others of these top advertisers listed at page 11:02:46
16 -857?

17 MR. DAVIS: Object to the form.

18 THE DEPONENT: Direct sales was a label
19 used in our ads -- in our -- in our ads sales
20 organization in that 2012 time period. I am not 11:03:05
21 sure if it was still in use in 2018.

22 Q. (By Ms. Weaver) Were there other phrases
23 in use after 2012 to refer to the team that dealt
24 with top advertisers?

25	A. Yes.	11:03:21
----	---------	----------

1 MR. DAVIS: Object to the form. 11:03:22

2 Q. (By Ms. Weaver) What was that term?

3 A. In 2018, I believe we referred to that
4 team as the "global sales organization."

5 Q. Are you also familiar with the phrase 11:03:39
6 "strategic partners"?

7 MR. DAVIS: Object to the form.

8 THE DEPONENT: Can you clarify the
9 context for that phrase.

10 Q. (By Ms. Weaver) Are you familiar with 11:03:53
11 the use of the term "strategic partners" as a
12 category of partners at Facebook?

13 MR. DAVIS: Object to the form.

14 THE DEPONENT: I have heard the term
15 used. 11:04:11

16 Q. (By Ms. Weaver) And in what context?

17 A. We have a team that works with Facebook
18 marketing partners, and these are businesses
19 whose -- who have built their business integrating
20 with Facebook's marketing API or ads API, and, 11:04:37
21 historically, we've had -- offered closer support
22 to a subset of these marketing partners, and I had
23 heard the term "strategic partners" used in that
24 context.

25 Q. And what is the team that's in charge 11:04:56

1 at -- at Facebook of dealing with the strategic 11:04:58

2 partners?

3 MR. DAVIS: Object to the form.

4 THE DEPONENT: In this particular

5 context, it was our Facebook marketing partners 11:05:10

6 team.

7 Q. (By Ms. Weaver) And who leads that team?

8 MR. DAVIS: Object to the form.

9 THE DEPONENT: I don't know offhand who

10 leads that team. 11:05:23

11 Q. (By Ms. Weaver) Okay. Do you know

12 anybody on the team by name?

13 MR. DAVIS: Object to the form.

14 THE DEPONENT: Not anyone still at the

15 company. 11:05:38

16 Q. (By Ms. Weaver) Okay. Turning back to

17 the page before you at -857, do you see -- well,

18 strike that.

19 Do you know who might have been involved

20 in the preparation of a slide like this? 11:06:02

21 MR. DAVIS: Object to the form.

22 THE DEPONENT: Yeah, it's -- it's hard to

23 say offhand who -- who would have prepared this

24 slide.

25 Q. (By Ms. Weaver) Do you know whether it 11:06:56

1 would be the finance team? 11:06:56

2 A. They may have been involved.

3 Q. Okay. Anyone else you can think of?

4 A. The other team who comes to mind who

5 often tracks advertiser revenue and 11:07:19

6 advertiser-level revenue is a team called BP&O,

7 which is an analytics team that works specifically

8 with the sales organization.

9 Q. And what does BP&O stand for?

10 A. I think it's Business Process & 11:07:37

11 Operations. I'm not certainly certain about the

12 "P."

13 Q. And do you know who is on the BP&O team

14 by name?

15 A. Yes. 11:07:52

16 Q. Who?

17 A. Venkatesh Iyer is someone that I've

18 worked with recently.

19 V, as in "Victor," E-N-K-E-T-E-S-H. Last

20 name I-Y-E-R. 11:08:04

21 Q. And why do you think members of the BP&O

22 team might have been involved in the creation of

23 this slide?

24 A. They -- they specifically work with the

25 sales org to track attainment against quarterly 11:08:27

1 quotas, and so my -- my guess would be either they 11:08:32
2 were involved in this slide if the finance team
3 wasn't.

4 Q. Thank you. That's helpful.

5 Now, looking at the slide here, you see 11:08:52
6 that Beijing Bytedance had 1,072 percent growth
7 year over year, correct?

8 A. Yes.

9 Q. And then if you look, there's a bar chart
10 on the right labeled "Monthly Bytedance Spend % of 11:09:09
11 Spend from Policy-Violating Ads."

12 Do you see that?

13 A. I see that, yes.

14 Q. And then there -- it's a little hard to
15 tell with -- well, we'll have to request this in 11:09:32
16 color, but there are two lines, and under it, it
17 says, "Share of revenue from policy-violating ads,"
18 and then "Bytedance Spend."

19 Do you see that?

20 A. Yes, I see that. 11:09:51

21 Q. And as you look at this slide, can you
22 tell which line reflects the share of revenue from
23 policy-violating ads?

24 MR. DAVIS: Object to the form.

25 THE DEPONENT: I -- I think it's the -- 11:10:08

1 the bars on the bar chart that reflect the share of 11:10:08
2 revenue from policy-violating ads.

3 Q. (By Ms. Weaver) And do you have an
4 understanding as -- what it means to say
5 "policy-violating ads"? 11:10:19

6 MR. DAVIS: Objection. Form and scope.

7 THE DEPONENT: Yes. We have a set of ad
8 policies, and my understanding is here we are
9 tracking revenue that comes from ads that violate
10 those policies. 11:10:47

11 Q. (By Ms. Weaver) And do you know if
12 Bytedance's continued, after 2018, to pay for
13 policy-violating ads?

14 MR. DAVIS: Objection. Form and scope.

15 THE DEPONENT: Can -- can you clarify 11:11:18
16 what you mean by "pay for policy-violating ads"?

17 MS. WEAVER: Sure.

18 Q. (By Ms. Weaver) Does this chart -- well,
19 let me ask you this: When it says "Monthly
20 Bytedance Spend," what does that mean? 11:11:27

21 A. This should refer to advertising
22 revenue -- or monies spent by -- by Bytedance on
23 ads.

24 Q. And Facebook received that revenue?

25 A. Yes. 11:11:41

1 Q. Does Facebook still receive revenue from 11:11:43
2 Bytedance's for policy-violating ads?

3 MR. DAVIS: Objection. Form and scope.

4 THE DEPONENT: I'm not closely familiar
5 with Bytedance's current ads spend or behavior. 11:11:57

6 Q. (By Ms. Weaver) Is Bytedance's still one
7 of Facebook's top advertisers?

8 MR. DAVIS: Objection. Form.

9 THE DEPONENT: I don't know offhand.

10 Q. (By Ms. Weaver) Do you know, prior to 11:12:19
11 January of 2017, if Bytedance's was one of
12 Facebook's top advertisers?

13 MR. DAVIS: Objection. Form.

14 THE DEPONENT: Sorry. Could you just
15 clarify what you mean by "top advertisers"? 11:12:30

16 Q. (By Ms. Weaver) I'm just reading it from
17 the page of the document.

18 A. So is your question -- is your question
19 about whether they would show up on a similar
20 document, or about something else? 11:12:48

21 Q. Do you know if -- prior to January of
22 2017, if Bytedance's was one of Facebook's top
23 advertisers?

24 MR. DAVIS: Objection. Form.

25 THE DEPONENT: So my understanding of 11:13:04

1 this slide that references top advertisers is it's 11:13:05
2 ranking advertisers specifically based on
3 revenue -- quarterly revenue.

4 I am not sure if, prior to 2017,
5 Bytedance appeared -- would have appeared at the 11:13:15
6 top of this list.

7 Q. (By Ms. Weaver) Okay. Do you know if
8 Bytedance's was penalized by Facebook for its
9 policy-violating ads?

10 MR. DAVIS: Objection. Scope. Form. 11:13:36

11 THE DEPONENT: I'm not familiar of --
12 about specific actions that we might have taken
13 with Bytedance.

14 Q. (By Ms. Weaver) Do you know who might
15 be? 11:13:47

16 MR. DAVIS: Objection. Scope.

17 THE DEPONENT: The business integrity
18 team would be more familiar.

19 Q. (By Ms. Weaver) And can you name anyone
20 on the business integrity team at this time? 11:13:57

21 MR. DAVIS: Objection. Scope.

22 THE DEPONENT: Natalie Kubitz is one
23 person.

24 K-U-B-I-T-Z, as in "zebra."

25 MS. WEAVER: Thank you. 11:14:16

1 Q. (By Ms. Weaver) Anyone else? 11:14:17

2 A. That is the person that I would reach out
3 to to learn about this topic.

4 Q. And do you have any recollection, as you
5 sit here, of whether or not Bytedance suffered any 11:14:35
6 consequences for privacy violations at all?

7 MR. DAVIS: Objection. Form. Scope.

8 THE DEPONENT: You mean policy
9 violations, or privacy?

10 MS. WEAVER: How I -- either, actually. 11:14:51

11 MR. DAVIS: Same objections.

12 THE DEPONENT: So I have no knowledge
13 about any privacy violations. With respect to ad
14 policy violations, I don't have any knowledge of
15 specific actions, but if there were 11:15:11

16 policy-violating ads that were -- if -- if this was
17 an issue coming up very frequently and at high
18 volume, then I would assume that we were addressing
19 this with -- with Bytedance.

20 Q. (By Ms. Weaver) And when we tes- -- when 11:15:27

21 you testified earlier about Facebook's decision not
22 to pursue [REDACTED], you said that
23 was based on whether or not the business was
24 sustainable or really prioritizing other business
25 opportunities. 11:15:44

1 Did Facebook take into any -- into 11:15:45
2 consideration any concerns about privacy with
3 regard to prem- -- [REDACTED]?

4 MR. DAVIS: Objection. Form.

5 THE DEPONENT: Just -- just to repeat, 11:16:07
6 your question was, did we consider anything with
7 respect to privacy in -- in making these decisions?

8 MS. WEAVER: Yes.

9 THE DEPONENT: Yes.

10 So I'm -- I'm not familiar with the -- 11:16:21
11 with the exact details of these product
12 discussions. But in any product decisions we make,
13 we do consider policy and privacy as one -- as one
14 of the dimensions of whether it makes sense to
15 proceed with -- with a decision or not. 11:16:42

16 Q. (By Ms. Weaver) And when you discussed
17 these topics with Mr. Osofsky in preparation for
18 your deposition, did you discuss privacy concerns
19 with regard to [REDACTED]?

20 A. No. 11:16:56

21 Q. Okay. And looking at the bottom of the
22 page here, there are asterisks under the "Top
23 Advertisers" chart.

24 Do you see where it says, first, "Totals
25 are calculated without House Ads"? 11:17:09

1 A. Yes, I see that. 11:17:17

2 Q. What are "House Ads"?

3 A. This refers to ads that we might run
4 internally. For example -- and -- and not charge
5 an advertiser for. An example is we -- we 11:17:35

6 sometimes run sort of public-service-announcement
7 ads. We'll partner with nonprofits to run these,
8 and we are not billing any sort of revenue for
9 those ads.

10 Q. And are there -- well, strike that. 11:17:48

11 Does Facebook track costs associated with
12 the running of house ads?

13 MR. DAVIS: Objection. Form.

14 THE DEPONENT: The -- this -- this would
15 be something we -- we measure when we run those, 11:18:18
16 yes.

17 Q. (By Ms. Weaver) And looking at this
18 page, you see a reference to
19 "Post-Cambridge Analytica spend drop"?

20 Do you see that? 11:18:32

21 A. Yes.

22 Q. And it refers to a 90-percent drop in
23 average daily spend for one category, and then a
24 50 percent drop in average daily spend for others.

25 Do you see that? 11:18:43

1 MR. DAVIS: Object to the form. 11:18:45

2 THE DEPONENT: I see -- I see the

3 greater-than-90-percent drop for one column of

4 advertisers and greater-than-50-percent drop for --

5 for another column. 11:18:59

6 MS. WEAVER: Fair enough.

7 Q. (By Ms. Weaver) And what is "average

8 daily spend"?

9 A. This should refer to their -- an

10 advertiser's average daily spend on ads. 11:19:11

11 Q. And is it your understanding that

12 Facebook has the ability to calculate the drop in

13 average daily spend, and it probably did so here

14 based on internal tracking of -- of that average

15 daily spend? 11:19:29

16 MR. DAVIS: Object to the form.

17 THE DEPONENT: Yes.

18 Q. (By Ms. Weaver) And so it would be

19 possible for Facebook to identify the actual

20 revenue amount that was the impact 11:19:41

21 post-Cambridge Analytica in this spend drop?

22 MR. DAVIS: Object to the form.

23 THE DEPONENT: Is your question about

24 whether we could identify the actual booked revenue

25 from these advertisers before and after 11:20:04

1 Cambridge Analytica, or? 11:20:08

2 Q. (By Ms. Weaver) If the daily spend is
3 booked revenue, then, yes, I think that would be
4 the -- the answer, right?

5 MR. DAVIS: Object to the form. 11:20:18

6 Q. (By Ms. Weaver) Let me put it this way:
7 This percentage was calculated on some numbers, not
8 just a feeling, right?

9 A. That's correct.

10 Q. Okay. And those numbers exist at 11:20:25
11 Facebook somewhere, you would imagine, correct?

12 A. Assuming we've retained the data for this
13 period, yes.

14 Q. And so it would be possible, if asked,
15 for Facebook to provide the actual amount in 11:20:38
16 dollars of the spend drop that is set forth on this
17 chart for each of these entities, correct?

18 MR. DAVIS: Object to the form.

19 THE DEPONENT: If -- it -- it's not clear
20 from this chart which exact period the -- the -- 11:20:58
21 the comparison is being made between, like which
22 date ranges. But if that were clear, then it
23 should be possible for us to get to those numbers.

24 MS. WEAVER: Fair enough.

25 Q. (By Ms. Weaver) Do you see at the lower 11:21:18

1 left-hand corner the three asterisks that say -- 11:21:19
2 A. Oh.
3 Q. -- "post-CA: 4/1 to 4/11 vs. pre-CA: 2/9
4 [sic] to 3/16"?
5 A. Yes. Yes. 11:21:29
6 Q. Do you think it's possible that refers to
7 the time periods?
8 A. Yes.
9 Q. Okay. Thank you.
10 Let's turn to the page ending at -861, 11:21:37
11 and Q2 -- it says there "Q2'18 Ads Revenue
12 Forecast."
13 A. Yes.
14 Q. And I just have a question here.
15 Do you see where it says, "Products - 11:21:59
16 Deprecation of Suggested Videos at the end of April
17 to drive 2pp deceleration in products"?
18 Do you see that?
19 A. Yes.
20 Q. Do you know what "2pp" means? 11:22:11
21 A. I would guess it stands for "2 percentage
22 points."
23 Q. And do you a recollection that Facebook
24 deprecated suggested videos at the end of API 2018?
25 MR. DAVIS: Objection. Scope. 11:22:39

1 THE DEPONENT: I was not and I'm not 11:22:40
2 familiar with this specific product decision.
3 Q. (By Ms. Weaver) Do you know who might
4 be?
5 A. I don't believe he was at Facebook at the 11:23:11
6 time, but Beau Avril -- Avril might know where to
7 find an answer.
8 That's B-E-A-U. Last name A-V, as in
9 "Victor," R-I-L.
10 MS. WEAVER: Thank you very much. 11:23:26
11 I will ask you to turn, please, to the
12 page ending at -65 -- -865 [sic], and it says at
13 the top "CPMs - Decelerated and Lower Than
14 Forecast."
15 MR. DAVIS: And, Ms. Weaver, did you say 11:23:46
16 -865?
17 MS. WEAVER: I'm sorry, -864. I
18 apologize.
19 Q. (By Ms. Weaver) What is "CPM"?
20 A. It stands for "cost per milli," and that 11:24:00
21 means cost per thousand impressions.
22 Q. And, again, what is an impression?
23 A. It is, roughly, the number of -- when --
24 when an ad is shown. We do have a -- a more
25 specific definition, which is, you know, when -- 11:24:16

1 like, that relates to when an ad actually loads on 11:24:18
2 someone's device.

3 Q. And looking at "Worldwide CPMs" here, do
4 you see that there are initials in a column?

5 A. Yes. 11:24:36

6 Q. What are -- what do those initials
7 reflect?

8 MR. DAVIS: Object to the form.

9 THE DEPONENT: These initials relate to
10 places that ads can appear on our platforms. 11:24:53

11 Q. (By Ms. Weaver) And so can you decode
12 them for me?

13 A. MF should stand for "mobile feed." WF,
14 "Web Feed." RHC, "Right-Hand Column." SV I was
15 not previously familiar with, so I would be 11:25:20
16 guessing. And AB I'm also not familiar with. IA
17 should stand for "Instant Articles." I think the
18 MGR should be "Messenger." IGF should be
19 "Instagram Fee," and IGS should be "Instagram
20 Stories," and AN should be "Audience Network." 11:25:50

21 Q. Thank you very much.

22 And then, at the next slide, which does
23 truly end in -865, do you see the header "CTR -
24 Declined" Year over Year "for 1st time Ever"?

25 A. Yes. 11:26:10

1 Q. What is "CTR"? 11:26:10

2 A. It stands for "click-through rate."

3 Q. And this was tracked for North America;
4 is that right, on this page?

5 MR. DAVIS: Object to the form. 11:26:25

6 THE DEPONENT: The table at the bottom
7 shows click-through rate broken down by each of
8 these major four regions globally, and NA stands
9 for "North America."

10 Q. (By Ms. Weaver) Great. Thank you. 11:26:45

11 Turning to the next page -- I'm sorry,
12 two pages to end in Bates No. -869 [sic], do you
13 see where it lists revenue share, and it says "Ad
14 Break" there and "Suggested Videos"?

15 MR. DAVIS: I'm sorry, Ms. Weaver, which 11:27:13
16 page are we talking about?

17 MS. WEAVER: -868.

18 MR. DAVIS: -868. Okay.

19 THE DEPONENT: Yes, I see that.

20 Q. (By Ms. Weaver) Okay. So AB may be "Ad 11:27:24
21 Break." SV is "Suggested Videos." IA is "Instant
22 Articles," as you said; is that right?

23 A. Yes.

24 Q. Great.

25 Finally, please turn to the page ending 11:27:42

1 in -880. 11:27:44

2 A. Okay.

3 Q. Do you where it says, "Unblocking Ads in

4 Q1 80% of Historical Trend"?

5 Do you see that? 11:28:11

6 A. Yes.

7 Q. Do you have an understanding as to what

8 that's referring to?

9 A. No.

10 Q. Do you know what it means to block ads? 11:28:53

11 A. I haven't heard the term before, but my

12 guess would be it refers to some of our business

13 integrity work.

14 Q. Okay. Great. Thank you.

15 So we've discussed a little bit clicks, 11:29:41

16 views, and impression.

17 Do you recall that?

18 Thanks, Matt.

19 A. I'm sorry, the question was --

20 Q. So Facebook -- 11:29:50

21 A. -- do you --

22 Q. Yeah.

23 Facebook receives revenue, in part, by

24 payment for clicks, impressions, and views; is that

25 correct? 11:29:58

1 MR. DAVIS: Objection. Form. 11:30:01

2 THE DEPONENT: We do receive payment for

3 ads based on impressions and for link clicks. In

4 the past, we have also allowed advertisers to pay

5 for ads by number of video views, but I'm not 11:30:16

6 certain if we still offer that option.

7 Q. (By Ms. Weaver) And how does Facebook

8 track and report that activity; clicks,

9 impressions, views, or video -- I'm sorry.

10 Is -- are views different than video 11:30:34

11 views?

12 A. We -- vid- -- videos are -- are what we

13 allowed previously as a billing option for ads.

14 "Views" could be used as a broader term of --

15 relating to views of different types of content. 11:30:50

16 Q. Fine. Then I'm going to separate it out

17 and say there are four categories: Clicks,

18 impressions, views, and video views.

19 With -- sorry, go ahead.

20 A. For -- for billing purposes, we 11:31:05

21 allowed -- we allow or have allowed advertisers to

22 pay per impression, link clicks, video views, and

23 app installs as kind of the major categories.

24 Q. Links click, views video, and app

25 installs? 11:31:36

1 A. And impressions, yes. 11:31:37

2 Q. And impressions.

3 And so for each of those -- and you can
4 take them one by one -- how does Facebook track and
5 then report to those third parties the results that 11:31:46
6 would trigger payment?

7 MR. DAVIS: Objection. Foundation.

8 THE DEPONENT: We log when these events
9 happen. There is some -- there are some steps
10 around verification on whether these events are 11:32:19
11 billable that are -- define -- the process is
12 defined and managed by our accounting team, and --
13 sorry. Can you -- could you repeat your question.
14 I think I'm missing the end of it.

15 Q. (By Ms. Weaver) So how -- you're right, 11:32:40
16 because it's in multiple steps, so we can break it
17 down.

18 So, first, you say that Facebook logged
19 these events, and where does Facebook log these
20 events, and what team is responsible for that? 11:32:52

21 MR. DAVIS: Objection. Form and scope.

22 Q. (By Ms. Weaver) Well, let me just
23 rephrase it and explain why I'm asking.

24 I'm trying to figure out how Facebook
25 proves to third party that they should be paid for 11:33:04

1 these events, and so the first step would be: They 11:33:07
2 log it, and then somehow they present it to the
3 third parties. The third parties look at it and
4 decide: Okay. You're right. We're going to pay
5 you for that. 11:33:17

6 That is my rudimentary understanding, but
7 I'm here to explore why.

8 So the first step, just to repeat the
9 question, is: You said that for these events --
10 link clicks, impressions, video reviews, and app 11:33:26
11 installs -- Facebook logs the events; is that fair?

12 MR. DAVIS: Objection. Form.

13 THE DEPONENT: For -- for these events
14 that we are using for billing, we -- we do do
15 logging for these events. 11:33:46

16 Q. (By Ms. Weaver) And what teams are
17 responsible for the logging?

18 A. Our data engineering teams would be the
19 first people responsible to set up the mechanisms
20 for logging. 11:34:03

21 Q. And then the next -- does the logging
22 team then report to the team that interfaces with
23 Facebook's business partners and re- -- roll that
24 into a report that is then sent to the third
25 parties? 11:34:29

1 MR. DAVIS: Objection. Form. 11:34:29

2 THE DEPONENT: I think that the data

3 engineering team is responsible for setting up the

4 mechanisms to track when these billable events

5 happen; set up data pipelines to make sure that, 11:34:44

6 you know, these event -- events are counted and

7 aggregated in some databases.

8 Our finance team then works with the same

9 databases to understand, of the events that

10 happened, which we are actually able to bill for. 11:35:05

11 Again, there are complex policies that -- that have

12 been formed and that they use to kind of arrive at

13 the final number.

14 Once they arrive at the final number,

15 they will also -- they are also responsible for 11:35:23

16 producing the invoices that are sent to advertisers

17 that they are responsible for paying.

18 Q. (By Ms. Weaver) And so, for example, for

19 app installs, there should be invoices that were

20 sent on a monthly basis to the partners who are 11:35:43

21 paying Facebook for those app install events; is

22 that right?

23 MR. DAVIS: Objection. Form.

24 THE DEPONENT: The frequency of the

25 invoices would depend on the advertiser's payment 11:36:01

1 method and, I believe, also on some billing 11:36:07

2 settings that they are able to configure.

3 Q. (By Ms. Weaver) And somewhere Facebook

4 has an internal system that is reflecting when the

5 invoice went out and whether it was paid; is that 11:36:21

6 right?

7 MR. DAVIS: Objection. Form.

8 THE DEPONENT: We do keep track of when

9 invoices are sent out and -- and when they are

10 paid. 11:36:39

11 Q. (By Ms. Weaver) Okay. And those are

12 records that are regularly maintained at Facebook

13 and available, right?

14 MR. DAVIS: Objection. Form.

15 THE DEPONENT: We should keep records of 11:36:54

16 this. I'm not sure on, you know, retention

17 periods. Yeah.

18 Q. (By Ms. Weaver) Are you familiar with

19 the term "custom audiences"?

20 A. Yes. 11:37:22

21 Q. What are "custom audiences"?

22 A. They are one of the targeting products we

23 offer for advertising.

24 Q. And what is a "targeting product"?

25 A. These are ways advertisers can specify 11:37:40

1 their -- the desire -- their desired audience for 11:37:45
2 their ads.

3 Q. And just as a definitional question, when
4 you say "advertisers," would that also, for
5 example, include political organizations that 11:37:56
6 aren't, per se, selling anything?

7 MR. DAVIS: Object to the form.

8 THE DEPONENT: When I say "advertisers,"
9 I'm referring to anyone who is purchasing ads on
10 our platform. 11:38:15

11 Q. (By Ms. Weaver) Okay. And how can
12 advertisers specify their desired audience for
13 their ads?

14 MR. DAVIS: Object to form.

15 THE DEPONENT: They -- they would do so 11:38:46
16 via our targeting products.

17 Q. (By Ms. Weaver) And how does -- which
18 targeting products in specific -- specifically are
19 you referring to?

20 MR. DAVIS: Obj- -- object to the form. 11:38:54

21 THE DEPONENT: We offer a number of
22 targeting products and targeting options to -- as
23 people set up ads using our interfaces, and they
24 can include things like demographics, age, gender,
25 location. There are some behavioral options or 11:39:20

1 things along the lines of interest, so I can target 11:39:27
2 people interested in sports. I can target people
3 interested in food and cooking, things along that
4 line -- things along those lines, and we -- we
5 als- -- also offer things like custom audience 11:39:41
6 where an advertiser can actually say, "Here is
7 a" -- "I want to reach people like my current
8 customers," and there's a way for an advertiser to
9 take a list of their existing customers and convert
10 that into an audience that they can use for their 11:40:08
11 Facebook-ads targeting.

12 Q. (By Ms. Weaver) And how does Facebook
13 report, then, the measurement of whatever metric
14 those paying partners are seeking?

15 MR. DAVIS: Object to the form. 11:40:31

16 THE DEPONENT: Sorry, could you clarify a
17 bit more what -- what you are interested in?

18 MS. WEAVER: Sure.

19 Q. (By Ms. Weaver) So if a -- let's say a
20 company like Procter & Gamble wants to send ads and 11:40:47
21 says, "I want to target this audience with -- for
22 impressions and clicks," what are the mechanisms by
23 which Facebook then reports back -- I mean, we have
24 talked about the reports, but does -- how does
25 Facebook actually track the events? 11:41:06

1 MR. DAVIS: Object to the form. 11:41:10

2 THE DEPONENT: Are -- are you asking how
3 we track the events, like impressions and
4 clicks that --

5 MS. WEAVER: Right. 11:41:20

6 THE DEPONENT: -- the advertiser is
7 interested in?

8 MS. WEAVER: Yes.

9 THE DEPONENT: Similar to the -- our
10 previous conversation, we do log events relating to 11:41:29
11 activity on ads, including impressions, clicks,
12 video views for ads that includes videos and a host
13 of other metrics. And, you know, we have data
14 engineering teams who are responsible for building
15 the mechanisms to -- to log these events. 11:41:55

16 Q. (By Ms. Weaver) I'm sorry. I'm going to
17 withdraw my question because I'm asking you the
18 wrong question.

19 Does Facebook allow third parties to
20 target users based on identifiers, such as device 11:42:07
21 identifiers, or did -- has it at any time during
22 the class period?

23 MR. DAVIS: Objection. Form and scope.

24 THE DEPONENT: Two examples come to mind
25 where device identifiers have been involved in the 11:42:49

1 targeting options we have offered to advertisers -- 11:42:59
2 to some advertisers.

3 Q. (By Ms. Weaver) And what are those?

4 A. So we spoke -- so for the first example,
5 we spoke earlier about some partnerships we had 11:43:10
6 with the [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED].

10 So we could see, for example, if someone 11:43:40
11 was accessing a [REDACTED]

12 [REDACTED]

13 [REDACTED]

14 [REDACTED]

15 [REDACTED]

16 [REDACTED]

17 [REDACTED]

18 Another important example of using device

19 identifiers in ads targeting is for mobile app

20 install apps, and, you know, for -- for advertisers 11:44:26

21 using ads to drive installs of a mobile app or

22 purchases that might occur within a mobile app, an

23 important thing for these advertisers is to know

24 who is installing their app and who is -- who is

25 actually then going on to pur- -- make purchases 11:44:50

1 in- -- inside -- inside an app. And so we have 11:44:54
2 offered targeting options relating to those aspects
3 that leverage device identifier information.

4 Q. Okay. I'll ask you to -- well, actually,
5 really quickly, in both of those examples, the 11:45:11
6 users were being targeted technically using their
7 IDFA, but were they also being targeted based on
8 certain characteristics that the advertiser was
9 seeking to stimulate a response?

10 MR. DAVIS: Objection -- 11:45:32

11 Q. (By Ms. Weaver) And let me -- let me ask
12 it this way, and then I will read the question
13 back.

14 So it wasn't just everybody who has an
15 iPhone. It was women in Oakland who are over 50 11:45:38
16 who also had a iPhone, but there -- were there
17 other characteristics that are targeted by the
18 advertiser, and then the IDFA is a mechanism for
19 identifying whether or not they have a phone?

20 MR. DAVIS: Object to the form and scope. 11:45:57

21 THE DEPONENT: So -- I will try to break
22 that down to clarify how -- the different targeting
23 options we do offer.

24 MS. WEAVER: Thank you.

25 THE DEPONENT: So there is always, 11:46:20

1 you know, regardless of whether any device 11:46:23

2 identifiers are used, the ability for an advertiser

3 to, you know, set many different targeting

4 criteria -- to apply different targeting criteria

5 to an ad, including location, you know, gender, 11:46:39

6 et cetera, interest, that kind of thing.

7 You actually brought up another example
8 of where we do use -- we have, historically,
9 offered targeting options that leverage device
10 identifiers, which is historically -- I'm not sure 11:46:54
11 if this is still the case, but, historically, we
12 did offer the option to target based on device
13 type, so based on -- on -- on device usage of an
14 individual.

15 The -- the -- the -- the use case that I 11:47:10
16 was actually trying to describe originally was
17 around activity with mobile apps and within mobile
18 apps. And so for an advertiser -- for a mobile app
19 advertiser, they may specifically be interested in
20 knowing: If I show an ad to a person, are they 11:47:33
21 likely to install my app, or if I show an ad to a
22 person, are they likely to make purchases within my
23 app.

24	And in order for us to show ads to people	
25	more likely to install an app or make certain	11:47:51

1 in-app events and also to provide reporting for 11:47:54
2 advertisers -- back to advertisers so they can
3 understand the connections between showing ads and
4 those events, that also requires the use of device
5 identifiers, and so that's one other way that 11:48:09
6 that's related -- that -- that device identifiers
7 have related to the targeting options we offer.

8 Q. (By Ms. Weaver) Is the reporting that
9 you are referring to sometimes call "analytics"?

10 A. That wouldn't be an official term we use 11:48:29
11 for it internally, but others may call it that.

12 Q. What is the term that you refer to it
13 internally?

14 A. "Ads reporting."

15 Q. Okay. Are you also familiar with 11:48:40
16 lifetime value reports?

17 MR. DAVIS: Object to the form.

18 THE DEPONENT: I'm familiar with the
19 concept.

20 Q. (By Ms. Weaver) And what is the concept? 11:48:54

21 A. Within the context of app ads
22 specifically, advertisers are often interested to
23 know -- well, within the context of apps
24 specifically, businesses with apps are interested
25 to know how much a customer is going to be worth to 11:49:19

Page 101

1 that business over the lifetime of their being a 11:49:27
2 customer for that business.

3 Q. And does Facebook help calculate lifetime
4 value of users for some of its third-party
5 partners? 11:49:45

6 MR. DAVIS: Objection. Form.

7 THE DEPONENT: Are you asking if we
8 re- -- like, try to show these metrics in our ads
9 reporting, or -- or are you asking about something
10 else specifically? 11:50:18

11 MS. WEAVER: Well, I am trying just to
12 understand your testimony.

13 You said, "... within the context of
14 apps, businesses with apps are interested to know
15 how much a customer is going to be worth to that 11:50:25
16 business over the lifetime of their being a
17 customer for that business."

18 Q. (By Ms. Weaver) Does Facebook calculate
19 lifetime value for -- of customers, either for
20 itself or for its business partners? 11:50:37

21 MR. DAVIS: Objection. Form.

22 THE DEPONENT: It's not something we
23 calculate for ourselves, for our own business, and
24 with respect to apps businesses -- other apps
25 businesses, I don't -- I don't think we are in a 11:50:59

Page 102

1 great position to be able to calculate or make 11:51:01
2 projections for other businesses.

3 MS. WEAVER: Okay. I will show you -- if
4 you turn to Exhibit 365.

5 (Exhibit 365 was marked for 11:51:16
6 identification by the court reporter and is
7 attached hereto.)

8 MS. WEAVER: Let me know when you have it
9 up.

10 THE DEPONENT: Yes, I have it. 11:51:36

11 Q. (By Ms. Weaver) And I will be asking
12 some questions about this doc, but specifically
13 turning to the page ending -556, do you see where
14 it says "Mobile Measurement Partners"?

15 A. Yes. 11:51:54

16 Q. And it says, "As part of Mobile Ads, we
17 send user data (keyed on IDFA) to select
18 measurement partners to generate lifetime value
19 reports on behalf of developers. This allows
20 developers to determine the value of their users 11:52:07
21 without having direct access to the ad from which
22 the user originated."

23 Do you see that?

24 A. Yes.

25 Q. And that's what I'm referring to. 11:52:18

Page 103

1 Are you aware of fas- -- Facebook helping 11:52:20
2 measurement partners generate lifetime value
3 reports?

4 A. I see.

5 In -- in -- in the context of this 11:52:30
6 document and generally, these -- these mobile
7 measurement partners -- part of the value they
8 provide to developers is that they offer
9 measurement -- they offer developers ways to
10 measure things that are important to their -- 11:52:56
11 their -- their mobile app business.

12 The -- what -- what I'm aware of with
13 respect to the information we share with mobile
14 measurement partners is that we do send information
15 to help these partners illustrate the effectiveness 11:53:21
16 of ad spend across different advertising channels
17 for these developers.

18 Q. And who are mobile measurement partners?

19 MR. DAVIS: Objection. Form.

20 THE DEPONENT: Are -- are you asking what 11:53:48
21 they do, or looking for names of partners?

22 MS. WEAVER: Both.

23 THE DEPONENT: So, again, I think,
24 you know, app -- app developers have a variety
25 of -- of different measurement needs as they -- as 11:53:59

Page 104

1 they -- as they evaluate their business, so these 11:54:04
2 are a set of businesses that help specifically
3 with those -- with those use cases.

4 Some examples of mobile measurement
5 partners are AppsFlyer, Adjust, and Kochava. There 11:54:17
6 are many others.

7 Q. (By Ms. Weaver) I'm sorry. I didn't
8 catch that, the names of the companies.

9 A. Oh, AppsFlyer.

10 Q. Right. 11:54:34

11 A. Adjust and -- and Kochava are -- are --
12 are some that come to mind, but there are many
13 others.

14 Q. And has Facebook engaged in this process
15 of sending user data keyed on IDFA to measurement 11:54:45
16 partners to generate lifetime value reports over
17 the course of the class period, or is there a time
18 period specifically when they engaged them at
19 practice?

20 MR. DAVIS: Object to the form. 11:55:01

21 THE DEPONENT: I am not certain if there
22 was a specific time period where we have done this,
23 but -- yeah, not -- not sure on a specific time
24 period.

25 Q. (By Ms. Weaver) And IDFA, of course, is 11:55:21

1 the unique identifier associated with Apple 11:55:23

2 devices; is that right?

3 A. That's correct.

4 Q. And that -- strike that.

5 And do you know if Facebook can generate 11:55:35

6 records that reflect the -- its calculation of

7 lifetime value sent to these measurement partners?

8 MR. DAVIS: Object to the form.

9 THE DEPONENT: So I don't believe we were

10 sending information on lifetime value to these 11:56:03

11 partners, but, rather, it's the measurement

12 partners who are generating these reports, and our

13 role is that we would share some information; for

14 example, how many in-app events happened as a

15 result of ads or app installs that happen as a 11:56:23

16 result of ads. That might be inputs into these

17 lifetime value reports prepared by other parties.

18 Q. (By Ms. Weaver) And what is the

19 information that Facebook was sharing about users

20 so that they could generate lifetime value reports? 11:56:38

21 MR. DAVIS: Objection. Form.

22 THE DEPONENT: I think some examples of

23 information we would share are: The number of ads

24 shown to individuals, the number of installs that

25 happen as a result of these ads, and the number of 11:56:56

1 in-app purchases that happened as a result of these 11:56:59
2 apps.

3 Q. (By Ms. Weaver) Does Facebook share
4 information about the users themselves, including
5 user-generated content or categories that they fall 11:57:16
6 in for which the third parties are targeting them
7 for those ads?

8 MR. DAVIS: Object to the form.

9 THE DEPONENT: We would not share
10 user-generated content. We may have shared in the 11:57:30
11 past data about the ads, which might include the
12 targeting parameters implemented for those ads.

13 Q. (By Ms. Weaver) And when you say "the
14 targeting parameters implemented for those ads,"
15 what do you mean? 11:58:09

16 A. So -- and -- and this is what I -- I'm
17 not sure if this happened, but it's possible. But,
18 like, if -- if we -- when -- when an advertiser
19 sets up an ad -- I think, actually, you could
20 probably, like, retract this because, actually, I 11:58:36
21 don't think there's any reason we would actually
22 share an ad setup with a mobile measurement
23 partner, but what I'm -- what -- what I was
24 referring to was when you set up an ad -- when a
25 person sets up an ad, they will -- they will be 11:58:49

Page 107

1 able to set specific targeting options to associate 11:58:51
2 with that ad to specify their desired target
3 audience. And I am not sure if that information
4 was ever visible to mobile measurement partners. I
5 can't think of a reason why it would be. 11:59:06

6 Q. So the mobile -- the advertiser comes to
7 Facebook and says, "This is who I want to target.
8 These are the parameters." The ad is run, and then
9 Facebook provides data back associated with the
10 IDFA about -- to allow those measurement partners 11:59:23
11 to calculate lifetime value reports; is that right?

12 MR. DAVIS: Object to the form.

13 THE DEPONENT: My understanding is we --
14 yes -- yes, an -- an app advertiser runs an ad,
15 and, then, if they are working with a measurement 11:59:43
16 partner, then we would provide that mobile
17 measurement partner with information on which
18 individual saw ads and which individuals took
19 actions after seeing those ads, and that
20 information would be used by the measurement 11:59:59
21 partners to provide some sort of measurement.

22 MS. WEAVER: Okay. I would like you to
23 take a look at Exhibit 366.

24 (Exhibit 366 was marked for
25 identification by the court reporter and is 12:00:09

1 attached hereto.) 12:00:09

2 THE DEPONENT: Okay.

3 Q. (By Ms. Weaver) And have you seen
4 Exhibit 366 before?

5 A. Yes. 12:00:33

6 Q. When did you last see it?

7 A. I think that I last saw this yesterday.

8 Q. And do you know what it is?

9 A. It appears to be a summary of statistics
10 relating to our platform products for over a period 12:00:57
11 of a couple weeks.

12 Q. Okay. And I would like to ask you to
13 turn to the page ending in -459.

14 And while we are getting you there,
15 actually, do you know who generated these 12:01:27
16 statistics, or how they were generated?

17 MR. DAVIS: Object to the form.

18 THE DEPONENT: Sorry. I'm simultaneously
19 trying to get to -459.

20 MS. WEAVER: Sorry. 12:01:49

21 THE DEPONENT: Okay. I do not know who
22 generated this report, but it -- generally how we
23 would -- how -- how such a report would be -- would
24 be generated, we would be logging specific events
25 in -- in our systems for platform somewhat similar 12:02:06

Page 109

1 to what we do for ads. 12:02:11

2 Q. (By Ms. Weaver) And turning to the page
3 ending at -459, which is what you're looking at
4 right there, just for -- for some definitional
5 purposes, what is "Canvas"? 12:02:28

6 A. "Canvas" refers to desktop apps within
7 the Facebook service.

8 Q. And this chart here says "Canvas DAU per
9 FB DAU for Friend Count."

10 Do you see that? 12:02:48

11 A. Yes.

12 Q. What is your understanding of what that
13 title seems to represent the chart underneath it
14 reflects?

15 MR. DAVIS: Object to the form. 12:03:01

16 THE DEPONENT: So I would interpret this
17 table to reflect -- you take daily users -- daily
18 active users of Canvas, divide by that Facebook
19 daily users, and then look at the distribution of
20 that by the number of friends a person has. 12:03:32

21 Q. (By Ms. Weaver) And so can Facebook
22 isolate the number of friends a person has at any
23 given point in time, or does it only maintain the
24 current count?

25 MR. DAVIS: Objection. Scope. 12:03:51

Page 110

1 THE DEPONENT: I'm not sure how -- how 12:03:55
2 the logging for friend count is handled and how --
3 how long of a look-back window we have on that
4 information.

5 Q. (By Ms. Weaver) Do you know who might 12:04:07
6 know?

7 MR. DAVIS: Objection. Scope.

8 THE DEPONENT: The -- the data
9 engineering team would know, most likely.

10 Q. (By Ms. Weaver) Okay. Looking at the 12:04:20
11 next page, which is ending at -460, do you see it
12 says "Top Apps by Expected 28d Lifetime Value"?

13 A. Yes.

14 Q. Does "28d" there refer to 28 days?

15 A. Yes. 12:04:42

16 Q. And what does "lifetime value" refer to?

17 A. This should refer to lifetime value of a
18 person for the business whose app this is.

19 Q. And do you specifically know how Facebook
20 calculated lifetime value for users, as in, what 12:05:05
21 are the components of the formula?

22 MR. DAVIS: Objection. Form.

23 THE DEPONENT: I'm not aware of any
24 specific formulas, but I would expect that an
25 important component in projecting lifetime value is 12:05:29

Page 111

1 looking at the number of in-app purchases from 12:05:33
2 people.

3 Q. (By Ms. Weaver) Okay. And turning to
4 the page ending -473 -- this is page 64 -- and I
5 will direct your attention to "Expected LTV 28 12:05:51
6 (average L28 for users who installed 28 days ago)."

7 A. I see that line.

8 Q. Did Facebook also project lifetime value
9 of users?

10 MR. DAVIS: Object to the form. 12:06:25

11 THE DEPONENT: It -- it seems that, per
12 this table, we did.

13 Q. (By Ms. Weaver) And do you know who we
14 might talk to to understand how lifetime value is
15 calculated? 12:06:35

16 A. In the context of this table, someone who
17 worked on platform may know -- during this time
18 period of 2012, may know.

19 Q. And how about today; who is involved in
20 the calculation of lifetime value today? 12:06:58

21 MR. DAVIS: Objection. Form.

22 THE DEPONENT: I'm uncertain if we
23 calculate lifetime value today in a similar way.

24 Q. (By Ms. Weaver) Other than 2012, do you
25 know of anybody else who might -- well, strike 12:07:12

Page 112

1 that. Let me ask a better question. 12:07:16

2 Can you identify anybody who was involved
3 in the calculation of lifetime value at Facebook at
4 any point in time?

5 A. I don't know of specific names of people 12:07:29
6 who were.

7 Q. Do you know the names of teams?

8 A. I assume we also had a data engineering
9 team back in 2012, and -- and they should be able
10 to at least point to who -- who has more details. 12:07:48

11 MS. WEAVER: Okay. Great.

12 Let's take a quick break.

13 THE VIDEOGRAPHER: Okay. We are off the
14 record. It's 12:08 p.m.

15 (Recess taken.) 12:09:19

16 THE VIDEOGRAPHER: We are back on the
17 record. It's 1:01 p.m.

18 Q. (By Ms. Weaver) Good afternoon, Ms. Lee.

19 You understand you are still under oath,
20 correct? 01:01:37

21 A. Yes.

22 Q. Okay. Let's return to Exhibit 365, if we
23 could, and I will direct your attention to the
24 second page that begins with: "Sharing User Data
25 with Advertisers." 01:02:01

Page 113

1 As you see where -- it says, "As part of 01:02:02

2 [REDACTED]

3 [REDACTED]

4 [REDACTED]

5 [REDACTED]

[REDACTED]

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 Do you see that?

10 A. Yes. 01:02:25

11 Q. Are -- are you familiar with

12 [REDACTED]?

13 A. I have --

14 MR. DAVIS: Objection. Scope.

15 THE DEPONENT: I am not. 01:02:31

16 Q. (By Ms. Weaver) Do you know if it was

17 launched?

18 MR. DAVIS: Same objection.

19 THE DEPONENT: I do not.

20 Q. (By Ms. Weaver) And if it were launched 01:02:40

21 and there was a barter exchange of data, what is

22 your understanding of how Facebook would have

23 booked revenue for that exchange, based on your

24 conversations, presumably, with Bonnie and Seetha?

25 MR. DAVIS: Objection. Form and scope. 01:02:57

Page 114

1 THE DEPONENT: I don't have an any 01:03:03
2 understanding if this did launch, so I wouldn't be
3 able to speak to how revenue could have been
4 booked, if it did.

5 Q. (By Ms. Weaver) Did you discuss whether 01:03:13
6 or not Facebook booked revenue for any data
7 exchange at all?

8 A. No.

9 MR. DAVIS: Objection. Form.

10 Q. (By Ms. Weaver) Do you know if Facebook 01:03:26
11 booked revenue when it provided data to data
12 brokers and data brokers provided data to Facebook?

13 MR. DAVIS: Objection. Form.

14 THE DEPONENT: I'm not aware of any
15 instances where we booked revenue after giving data 01:03:51
16 to data brokers.

17 Q. (By Ms. Weaver) Are you aware of the
18 Customer Match program?

19 A. I am aware of the concept of matching as
20 it relates to some ads use indications. 01:04:13

21 Q. And what are you thinking of
22 specifically?

23 A. It's -- I'm thinking of the context that
24 we discussed a bit previously where, in mobile app
25 advertising, we want to be able to connect when we 01:04:41

Page 115

1 show ads to people with -- when -- whether those 01:04:50
2 same people install a mobile app or take -- make an
3 in-app purchase after -- after being shown an ad.

4 And, in the past, we have relied on
5 different methods of -- different methods to 01:05:13
6 identify individuals to be able to -- to make those
7 connections between showing an ad and -- and
8 understanding if a person installed an app or took
9 an in-app event.

10 Q. Does Facebook have a policy for recording 01:05:39
11 the value of identifiers or information it receives
12 from third parties?

13 MR. DAVIS: Objection. Form.

14 THE DEPONENT: I'm not aware of any such
15 policies. 01:06:01

16 Q. (By Ms. Weaver) Okay. And looking at --
17 back at Exhibit 365, back to mobile ads,
18 there's a -- I'm still on page -556, and there's a
19 bullet point "iOS 7," and do you see where it says,
20 "Apple announced that iOS 7 would no longer allow 01:06:19
21 applications to track user activity by using any
22 identifier other than its own Identifier for
23 Advertising (IDFA). Apple's decision will prevent
24 apps from having access to the device UDID, MAC
25 address, or any other identifier stored within the 01:06:39

Page 116

1 phone's shared memory space (such as the Facebook 01:06:41
2 attribution ID)."
3 Do you see that?
4 A. Yes.
5 Q. What is an "attribution ID"? 01:06:48
6 MR. DAVIS: Objection. Scope.
7 THE DEPONENT: I'm not familiar with this
8 exact concept.
9 Q. (By Ms. Weaver) Do you know whether an
10 attribution ID is how Facebook determines whether 01:07:09
11 or not performance under a contract has been
12 achieved; i.e., clicks or impressions that is,
13 thus, attributed to an event?
14 MR. DAVIS: Objection. Scope.
15 THE DEPONENT: Yeah, again, I'm not 01:07:25
16 familiar with this term specifically, but based on
17 the name, it's -- appears to be an idea that was
18 used for attribution in some way.
19 Q. (By Ms. Weaver) Okay. And then you see
20 where it says, "As a result, Facebook and all other 01:07:39
21 apps are keying collected and shared data to IDFA"?
22 Do you see that?
23 A. Yes.
24 Q. Do you know what "shared data" is
25 referred to here? 01:08:01

Page 117

1 MR. DAVIS: Objection. Scope. 01:08:02

2 THE DEPONENT: I don't know what this
3 refers to specifically.

4 Q. (By Ms. Weaver) Okay. We discussed
5 custom audience a little bit earlier. 01:08:11

6 Do you recall that?

7 A. Yes.

8 Q. And do you see here that, on the next
9 page, it says, "Custom Audiences using IDFA - We
10 are expanding our ad targeting capabilities to 01:08:22
11 allow developers to target ads to lists of IDFAs
12 that they upload to us. Our terms require
13 developers to respect all relevant opt-out
14 controls," et cetera.

15 Are you familiar with the pro- -- the -- 01:08:37
16 strike that.

17 Are you aware of whether Facebook did
18 allow developers to target ads to lists of IDFAs
19 that the developers then shared with Facebook?

20 MR. DAVIS: Objection. Form and scope. 01:08:56

21 THE DEPONENT: I'm -- sorry. Can you
22 repeat the question.

23 MS. WEAVER: Yeah. No problem.

24 Q. (By Ms. Weaver) Are -- are you aware of
25 whether Facebook allowed developers to target ads 01:09:17

Page 118

1 to IDFAs that the del- -- developers shared with 01:09:21
2 Facebook?

3 MR. DAVIS: Same objections.

4 THE DEPONENT: I see.

5 I am not aware of -- of this happening -- 01:09:37

6 whether or not this happened, but based on my

7 knowledge of custom audiences, I think that that

8 wouldn't be quite an accurate characterization of

9 how custom audiences work. I think custom

10 audiences is a product that allows for the creation 01:09:59

11 of targeting segments based on an advertiser's

12 customer information.

13 Facebook isn't receiving the customer

14 information in this process. We've built

15 technologies such that none of the personally 01:10:24

16 identifiable information from the advertiser gets

17 to us, and we don't have -- have visibility into

18 that raw customer data file. The -- the data is

19 hashed and encrypted before a custom -- before a

20 custom audience is formed that is actually usable 01:10:45

21 for targeting.

22 Q. (By Ms. Weaver) Are you aware of any

23 revenue recognition policy that Facebook had that

24 did account for occasions when Facebook was

25 receiving information about users from third 01:10:59

1 parties? 01:11:04

2 MR. DAVIS: Objection. Form.

3 THE DEPONENT: Sorry. Could you repeat

4 the question one more time.

5 MS. WEAVER: Yes. 01:11:21

6 Q. (By Ms. Weaver) Are you aware of any

7 revenue recognition policy that Facebook had at any

8 point in the class peri- -- period that accounted

9 for occasions when Facebook was receiving user data

10 from third parties? 01:11:34

11 MR. DAVIS: Objection. Form.

12 THE DEPONENT: I'm not aware of any such

13 policies.

14 (Exhibit 367 was marked for

15 identification by the court reporter and is 01:11:43

16 attached hereto.)

17 MS. WEAVER: I will have you look at

18 Exhibit 367.

19 And while you are pulling it up and for

20 the record, it bears Bates No. FB-CA-MDL-01835372 01:11:55

21 through -379. And it bears the words "Memorandum

22 of Understanding between [REDACTED] and Facebook."

23 MS. WEAVER: Yes.

24 Q. (By Ms. Weaver) Do you recall earlier

25 that we saw [REDACTED] as listed as one of the top 01:12:17

1 advertisers in 2018 with Facebook? 01:12:23

2 A. I don't recall seeing [REDACTED] there
3 specifically.

4 Q. Okay. We don't have to go back to it,
5 but it's there. 01:12:35

6 Are you familiar with this contract?

7 A. I believe I have seen this document
8 before.

9 Q. And is it a contract between [REDACTED] and
10 Facebook executed on or around 2018? 01:12:55

11 MR. DAVIS: Objection. Form.

12 THE DEPONENT: I -- I don't know if this
13 contract was actually executed.

14 Q. (By Ms. Weaver) How would I find out
15 whether it was? 01:13:10

16 A. Our sales team managing the relationship
17 with [REDACTED] should be able to confirm.

18 Q. Okay. And turn to the page ending in
19 -373 at the bottom?

20 A. Yes. 01:13:36

21 Q. I think we need to scroll down.

22 Okay. Do you see where it says, "Use of

23 [REDACTED] Consumer Data (and more generally consumer

24 eMail/identifiers and associated data on-boarded by

25 [REDACTED] onto the Facebook platforms)"? 01:13:54

1 Do you see that? 01:13:57

2 A. Yes.

3 Q. And do you see where it says, "[REDACTED]"

4 Consumer Data encompasses all Consumer data

5 on-boarded by [REDACTED] on the Facebook platforms, 01:14:06

6 and matched with Facebook platform User

7 Identifiers"?

8 Do you see that?

9 A. Yes.

10 Q. So what does it mean when it says the 01:14:20

11 data was on-boarded and matched with Facebook

12 platform user identifiers?

13 MR. DAVIS: Objection. Form. Scope.

14 THE DEPONENT: I assume that the

15 reference here could include things like the custom 01:15:28

16 audiences product we discussed previously where

17 [REDACTED] would have the opportunity to take a file

18 with their customer information and use Facebook

19 tools to create audiences for targeting for ads.

20 Q. (By Ms. Weaver) Okay. Let me walk you 01:15:49

21 through a couple of these paragraphs, and then I'll

22 ask some questions.

23 Looking at the top, do you see

24 subheading B is: "Use of consumer data gathered

25 through the Facebook Pixel Data (and more 01:15:59

Page 122

1 generally, consumer data originated from [REDACTED] 01:16:02
2 properties and gathered through Facebook tools)"?
3 Do you see that?
4 A. Yes.
5 Q. And then this contract provides: 01:16:09
6 "[REDACTED] Pixel Data encompasses all the mechanisms
7 provided to [REDACTED] by Facebook to gather consumer
8 behaviors on its digital properties, and develop
9 insights for analytics, as well as consumer
10 segmentation and targeting on Facebook platforms 01:16:25
11 (i.e. including and not exclusively Facebook,
12 Instagram, Messenger, Whatsapp)."
13 Do you see that?
14 A. Yes.
15 Q. So do you understand that Facebook 01:16:38
16 created a [REDACTED] pixel which allowed [REDACTED] to
17 gather data about consumer behaviors, not just on
18 [REDACTED] platforms but also on the Facebook
19 platform?
20 MR. DAVIS: Objection. Form and scope. 01:16:55
21 THE DEPONENT: My understanding is that
22 the reference here is about the Facebook pixel,
23 which is a tool that we provide all advertisers
24 with to allow for different targeting and
25 measurement use cases. 01:17:22

1 Q. (By Ms. Weaver) Is it true that the 01:17:23
2 pixel gathers data for both analytics and targeting
3 and segmentation?

4 MR. DAVIS: Objection. Scope.

5 THE DEPONENT: I would describe it as 01:17:39
6 providing targeting capabilities and measurement,
7 and so I think that's what they referred to as
8 "analytics" here -- "insight and analytics."

9 MS. WEAVER: Thank you.

10 Q. (By Ms. Weaver) What is "consumer 01:17:52
11 segmentation"?

12 MR. DAVIS: I'm going to object to the
13 form. Scope.

14 THE DEPONENT: My interpretation of this
15 language is the act of treating different groups of 01:18:05
16 consumers differently. And so perhaps the
17 reference here is showing different ads to
18 different people via targeting.

19 Q. (By Ms. Weaver) Okay. And looking back,
20 then, to where we started, it references here 01:18:29
21 [REDACTED] consumer data is being defined in the
22 contract to include consumer data that [REDACTED]
23 brought to place- -- Facebook platforms and matched
24 with user identifiers, and is it possible that
25 "user identifiers" refers to some kind of ID, like 01:18:52

Page 124

1 a TPID, a third-party ID? 01:18:57

2 MR. DAVIS: Objection. Form and scope.

3 THE DEPONENT: I don't see any reference
4 to matching in this pixel section.

5 Q. (By Ms. Weaver) Oh, sorry. That's my 01:19:14

6 fault. I'm back down at the paragraph that's two
7 paragraphs -- yeah, so I'm back to the first

8 sentence we read and looking at the clause "and

9 matched with Facebook platform user identifiers,"

10 and the question is: Do you have an understanding 01:19:28

11 what those identifiers are?

12 MR. DAVIS: Same objections.

13 THE DEPONENT: I'm -- I'm not sure the
14 specific identifiers that are -- are being

15 referenced in -- by this document. 01:19:53

16 Q. (By Ms. Weaver) Okay. And then below

17 it, it says, "[REDACTED] Consumer Data includes both
18 eMail/identifiers and associated data, as an

19 example and not exclusively: EMails collected on

20 [REDACTED] digital properties, eMails collected 01:20:07

21 through paper-based Loyalty programs and in store,

22 consumer Cookies that can be matched with Facebook

23 platforms User Identifiers for other means of

24 identification, associated data (consumer

25 interests, consumer purchases, segment, etc)." 01:20:23

Page 125

1 Do you see that? 01:20:33

2 A. I see that.

3 Q. And so do you understand that this is
4 proposing that the consumer data that [REDACTED] will
5 be bringing will then be matched with Facebook
6 platform user identifiers or another way of
7 identification?

8 MR. DAVIS: Objection. Form and scope.

9 THE DEPONENT: In -- it -- I -- I agree
10 that the document suggests that there is -- that 01:21:01
11 this data from [REDACTED] exists that can be -- can be
12 matched with various Facebook platform user
13 identifiers, but I do not know what specific
14 identifiers this document refers to.

15 Q. (By Ms. Weaver) Okay. And so backing up 01:21:26
16 for a second, in terms of revenue recognition, in a
17 contract like this, how did Facebook arrange for
18 whatever the events are for which it paid for
19 [REDACTED] You've talked about clicks, impressions,
20 views, video views -- did I get that right? -- but 01:21:46
21 we never discussed whether Facebook received
22 revenue for this kind of data matching?

23 MR. DAVIS: Object to the form.

24 THE DEPONENT: Is your question whether
25 Facebook did receive revenue for this kind of 01:22:08

Page 126

1 matching? 01:22:10

2 MS. WEAVER: Yes.

3 THE DEPONENT: I -- I have no knowledge
4 of any instances where -- where we would have
5 received revenue for -- for this kind of matching. 01:22:21

6 Q. (By Ms. Weaver) And just in terms of how
7 Facebook's contracts are structured, this agreement
8 doesn't reflect any events that trigger payment.

9 How were -- how were the contracts
10 normally structured, or is there sort of a form way 01:22:37
11 in which how Facebook receives revenue is laid out
12 in written contracts?

13 Let me ask a bad question, and then I'll
14 ask good one.

15 Sometimes there are top-level contracts, 01:22:50
16 and then there's another layer, and then there's
17 another piece that gets negotiated, and depending
18 on the industry, it may have a different name for
19 those nested added -- you know, additives
20 agreements. 01:23:02

21 Is there a standard way at Facebook with
22 regard to this kind of a agreement where subsequent
23 editions set forth how Facebook recognizes revenue?

24 That's the bad question. Let me ask the
25 good one. 01:23:17

Page 127

1 Do you have an understanding as to how, 01:23:19
2 as a general matter, Facebook establishes the
3 events for which it receives revenue in its
4 relationships with advertisers?

5 MR. DAVIS: Object to the form. 01:23:36

6 THE DEPONENT: For the most part, our
7 contract with advertisers that guides what we can
8 bill for and what they are responsible for paying
9 is reflected in our self-serve ad terms. So
10 that -- those are something that all advertisers 01:24:02
11 buying ads through our self-serve interfaces agree
12 to.

13 I'm aware of specific cases, often with
14 larger advertising agencies, where may have
15 additional terms that -- for ads buying that -- 01:24:20
16 that -- that are agreed to.

17 Q. (By Ms. Weaver) Does Facebook sometimes
18 enter into revenue-sharing agreements?

19 MR. DAVIS: Objection. Form.

20 THE DEPONENT: Are you asking about 01:24:47
21 revenue-sharing agreements with any specific types
22 of --

23 MS. WEAVER: Third party.

24 THE DEPONENT: -- parties? Any
25 specifics? 01:24:59

1 MS. WEAVER: Yeah, any -- just in 01:24:59
2 general.

3 THE DEPONENT: Yes. There are some --
4 sometimes we enter into rev- -- revenue-share
5 agreements. 01:25:10

6 Q. (By Ms. Weaver) And with whom does
7 Facebook enter into revenue-sharing agreements?

8 MR. DAVIS: Objection. Form.

9 THE DEPONENT: There are -- I'm -- I'm
10 aware of a couple of use cases, and there are 01:25:24
11 likely more, depending on the area of the business.

12 Today, one use case that comes to mind is
13 we -- for -- for advertising is that we have a --
14 something we call the "Facebook audience network,"
15 which is a network of publishers that we partner 01:25:47
16 with to help advertisers extend the reach of their
17 ads to websites and apps outside of Facebook.

18 So this -- the benefit of this is it --
19 advertisers gets extended reach for their ads with,
20 you know, the same powerful targeting capabilities 01:26:11
21 that we offer for Facebook ads. The benefit for
22 publishers in our network is that they are able to
23 sell more of their ads inventory that -- at -- at
24 rates that they find attractive.

25 And so we have a revenue-sharing 01:26:28

1 agreement with the publishers who are in this 01:26:30
2 network, and I think it's something like -- based
3 on the amount of ad spend that goes to the
4 publisher, they would get a percentage of -- of
5 that total spend. 01:26:46

6 MS. WEAVER: Great.

7 Let's look at what I hope has been marked
8 as Exhibit 368.

9 (Exhibit 368 was marked for
10 identification by the court reporter and is 01:27:04
11 attached hereto.)

12 MS. WEAVER: And for the record, as you
13 look at it and pull it up, it bears Bates
14 Nos. FB-CA-MDL-01994696 through -698. Bears the
15 name Sheryl Sandberg at top and the date of 01:27:19
16 April 12th, 2012. It's to Dan Rose.

17 Q. (By Ms. Weaver) Do you recognize
18 Exhibit 368?

19 A. Yes.

20 Q. What is it? 01:27:37

21 A. It is an email thread discussing some
22 monetization opportunities relating to developers.

23 Q. And who is Chris Daniels?

24 A. I understand that he was on our business
25 development team at the time. 01:28:04

Page 130

1 Q. Do you know where he is now? 01:28:05

2 A. I do not.

3 Q. Okay. And do you have an understanding
4 as to the subject matter of the email?

5 MR. DAVIS: Object to the form. 01:28:16

6 THE DEPONENT: It -- it is -- it relates
7 to an assessment of various opportunities around
8 developers.

9 Q. (By Ms. Weaver) And looking at -- the
10 subject is -- sorry. Just for the record, the 01:28:37
11 subject says, [REDACTED]
12 right?

13 A. That is what the subject line is.

14 Q. Okay. And looking a little lower, you
15 see the email where Mr. Daniels emailed Sam Lessin 01:28:49
16 and Mark Zuckerberg, copying Sheryl Sandberg and
17 others, and he wrote: "Mark, Sam - Dan asked that
18 I take a first cut at swagging opportunity size on
19 [REDACTED]

20 [REDACTED]. Below are initial thoughts for feedback 01:29:05
21 and to frame a future discussion."

22 Do you see that?

23 A. Yes.

24 Q. And so is it your understanding that his
25 email that follows is an analysis of several 01:29:15

Page 131

1 possibilities that Facebook might engage in? 01:29:18

2 MR. DAVIS: Object to the form.

3 THE DEPONENT: I agree that it is an

4 assessment of several opportunities that Facebook

5 might engage in. I actually disagree with his 01:29:32

6 characterization that these opportunities are about

7 selling access to data.

8 Q. (By Ms. Weaver) And do you see the

9 paragraph at the bottom where he says, "Last

10 thought was that I talked to BlueKai who runs a 01:29:49

11 data exchange about who captures value in their

12 world. The piece of interesting information was

13 that they don't use" revenue "share as a business

14 model for data as the people that consume the data

15 are incentivized to not attribute sales to it..." 01:30:01

16 Do you see that?

17 A. I see that, yes.

18 Q. Has that been an issue for Facebook in --

19 when it's engaging in revenue-sharing agreements?

20 MR. DAVIS: Object to the form. 01:30:13

21 THE DEPONENT: I -- I'm sorry. Could you

22 repeat the question?

23 MS. WEAVER: Sure.

24 Q. (By Ms. Weaver) Has that been an issue

25 for Facebook when it's engaging in revenue-sharing 01:30:54

Page 132

1 agreements? 01:30:57

2 A. Has this issue that BlueKai called out
3 been an issue for Facebook in our revenue-sharing
4 agreements?

5 Q. Yes. 01:31:08

6 A. It hasn't been an issue, to my knowledge,
7 and I think that's likely because we don't have a
8 business model like BlueKai describes here.

9 Q. What's different?

10 A. BlueKai runs a data exchange, and we do 01:31:28
11 not.

12 Q. And what is the basis for your statement
13 that Facebook doesn't run a data exchange?

14 A. My -- my understanding of -- of -- of
15 BlueKai's business model is that they are a broker 01:31:43
16 that buys and sells data, and that is not what
17 Facebook does.

18 Q. So your understanding of the definition
19 of a broker is an entity that buys and sells data?

20 A. That -- 01:32:04

21 MR. DAVIS: Object to the form.

22 THE DEPONENT: That is my understanding
23 of what a data broker does.

24 Q. (By Ms. Weaver) Turning to the next
25 page, do you see where it says, "Personal Data (Ad 01:32:13

Page 133

1 Network): Behavioral targeting is about a" 01:32:17
2 \$5 billion "industry (gross revenues)."
3 And the question is: What is "behavioral
4 targeting"?
5 A. My -- my -- my understanding of 01:32:36
6 behavioral targeting is it is the targeting for ads
7 based on actions that people take.
8 Q. Are you familiar with the phrase "OBA"
9 being used internally at Facebook?
10 MR. DAVIS: Object to the form and scope. 01:32:53
11 THE DEPONENT: I have heard the term
12 "OBA" used in the context of ads at Facebook.
13 Q. (By Ms. Weaver) And what does it stand
14 for?
15 A. I believe it's stands for "online 01:33:04
16 behavioral advertising."
17 Q. And so does Facebook engage in online
18 behavioral advertising?
19 MR. DAVIS: Object to the form. Scope.
20 THE DEPONENT: If you understand online 01:33:18
21 behavioral advertising to be targeting ads or -- or
22 providing ability to target ads based on people's
23 online actions, we -- we do -- we do offer
24 targeting options that -- that align with that
25 definition. 01:33:42

Page 134

1 Q. (By Ms. Weaver) And do you see where 01:33:42

2 Mr. Daniels wrote: "By simply starting a" Facebook

3 "ad network leveraging" Facebook "user information

4 off of the site, it seems like we could capture a

5 big amount of ad" dollars "that are today BT or 01:33:53

6 just standard display/ROI inventory and not yet

7 BT"?

8 Do you see that?

9 A. Yes.

10 Q. What does "BT" stand for, if you know? 01:34:04

11 A. I think it references "behavioral

12 targeting."

13 Q. And he wrote: "Also feels safer than

14 selling data to a 3rd party as the data remains in

15 our control." 01:34:20

16 Do you see that?

17 A. Yes.

18 Q. And so did Facebook, in fact, pursue this

19 avenue of engaging in behavioral targeting?

20 MR. DAVIS: Object to the form. 01:34:34

21 THE DEPONENT: This bullet point is about

22 building an ad network, and this is something we

23 did do.

24 Q. (By Ms. Weaver) And then a little bit

25 lower, do you see where it says [REDACTED] 01:34:45

1 A. Yes. 01:34:52

2 Q. What does "[REDACTED]" refer to?

3 A. It stands for [REDACTED]

4 Q. And what does that mean?

5 A. I understand it refers to a [REDACTED] [REDACTED]
[REDACTED]

7 Q. And it says "([REDACTED]"

8 Do you see that?

9 A. Yes.

10 Q. Is that reference to the same [REDACTED] 01:35:18
11 entity we were discussing earlier?

12 A. I believe so.

13 Q. And here it says, "[REDACTED]"

[REDACTED]

[REDACTED] [REDACTED]

[REDACTED]

[REDACTED]

18 Do you see that?

19 A. Yes.

20 Q. And does [REDACTED] pay Facebook for 01:35:39
21 validating the identity of users?

22 MR. DAVIS: Objection. Fou- -- form.

23 THE DEPONENT: [REDACTED] no longer exists.

24 We -- we -- we deprecated the product, and when it

25 did exist, I am not familiar if -- [REDACTED] 01:36:04

Page 136

1 [REDACTED] . 01:36:08

2 Q. (By Ms. Weaver) Why did Facebook
3 deprecate the product?

4 A. I am not familiar with the specific
5 decisions behind the deprecation. 01:36:20

6 Q. And what do you mean when you say
7 "deprecate"?

8 A. We shut down the service.

9 Q. Does [REDACTED] the company, still exist?

10 MR. DAVIS: Objection. Form. 01:36:31

11 Q. (By Ms. Weaver) Was [REDACTED] a Facebook
12 entity?

13 A. I understand it was a company that we
14 acquired.

15 Q. I see. Okay. Interesting. 01:36:41

16 Do you see where it says "[REDACTED]"

17 [REDACTED] below?

18 A. Yes.

19 Q. And does that refer to the [REDACTED]

20 concept that we discussed earlier? 01:36:53

21 A. Yes.

22 MS. WEAVER: Okay. How about tab 17.

23 (Exhibit 369 was marked for

24 identification by the court reporter and is

25 attached hereto.) 01:37:12

Page 137

1 MS. WEAVER: We'll mark, as Exhibit 369, 01:37:15
2 a document bearing Bates No. FB-CA-MDL-02148187.
3 And for the record, it is an email from
4 Allison Hendrix dated September 8th.
5 Q. (By Ms. Weaver) And let me know when 01:37:42
6 you've had a chance to review it.
7 A. Okay. I have reviewed it.
8 Q. What is Exhibit 369?
9 A. It is a -- an internal email from
10 Allison Hendrix to other employees at Facebook. 01:38:45
11 Q. Have you seen it before?
12 A. Yes.
13 Q. And do you see where Allison wrote: "Hi
14 Deborah and Anil, We're getting close to making a
15 change to how advertisers can create custom 01:38:59
16 audiences using" Facebook "UIDs."
17 Do you see that?
18 A. Yes.
19 Q. What did she -- what do you understand
20 the sentence to mean where it says "...advertisers 01:39:09
21 can create custom audiences using" Facebook "UIDs"?
22 MR. DAVIS: Objection. Form and scope.
23 THE DEPONENT: Could -- could you repeat
24 the question once more.
25 MS. WEAVER: Sure. 01:39:34

Page 138

1 Q. (By Ms. Weaver) You know, I can even 01:39:36
2 make it easier. See where it says, "Issue:
3 Advertisers are able to scrape" Facebook "IDs from
4 the Graph API and create custom audiences today
5 without consent or knowledge from the people 01:39:46
6 included in that audience, which violates our
7 policies."

8 Do you see that?

9 A. Yes.

10 Q. Do you have an understanding of how that 01:39:52
11 occurred or if this occurred?

12 MR. DAVIS: Objection. Scope.

13 THE DEPONENT: My understanding of the
14 issue is only based on this email. It sounds as if
15 there was some policy-violating way that people 01:40:10
16 could use our Graph API to procure Facebook IDs and
17 create custom audiences using those IDs.

18 Q. (By Ms. Weaver) And do you see at the
19 very bottom it says, "Revenue Risk: minimum
20 47" million to "maximum 300" million"? 01:40:31

21 A. Yes.

22 Q. Do you know how that was calculated?

23 A. I do not.

24 Q. Do you know the time period for which it
25 applied? 01:40:46

1 MR. DAVIS: Objection. Form. 01:40:51

2 THE DEPONENT: For which -- is your
3 question about the time period for which these --
4 this estimated revenue risk?

5 Q. (By Ms. Weaver) Yeah, that's what I was 01:41:06
6 asking. It's a little bit -- so revenue risk is
7 calculated here, and that would imply it's looking
8 forward, correct?

9 MR. DAVIS: Objection. Form.

10 THE DEPONENT: Sorry. Could you repeat 01:41:20
11 that last piece.

12 MS. WEAVER: Well, let me ask again.

13 Q. (By Ms. Weaver) To what time period does
14 this revenue risk apply?

15 A. My interpretation of this email is we 01:41:32
16 were proposing to put forth this -- push this
17 technical change that would alter the way custom
18 audiences could be created, and if we moved forward
19 with that change, the total revenue risk to the
20 company could be between 47 million to 300 million, 01:41:53
21 so it was sort of a one-time hit to revenue.

22 Q. And do you understand that there was
23 likely an underlying analysis that supported the --
24 this revenue risk conclusion?

25 A. That's a -- 01:42:18

1 MR. DAVIS: Objection. Form. 01:42:19

2 THE DEPONENT: That -- that -- that would
3 be my assumption.

4 Q. (By Ms. Weaver) And do you know -- is
5 there somebody at Facebook who regularly performs 01:42:24
6 this kind of revenue risk analysis, or is that the
7 kind of thing Ms. Hendrix would do?

8 A. The email is referencing a product
9 change, and typically when we are considering the
10 impact of a product change, we have data scientists 01:42:44
11 who work across each product area who would be
12 responsible for estimating the impact.

13 Q. And so for this product, which would be
14 custom audiences, do you know who the data
15 scientist might be who engaged in this revenue risk 01:43:05
16 analysis?

17 MR. DAVIS: Objection. Form.

18 THE DEPONENT: I don't know who would
19 have worked on it at the time, and -- but it --
20 custom audiences is a targeting product, so it 01:43:20
21 would have been most likely a data scientist
22 working in our targeting product area.

23 Q. (By Ms. Weaver) Do you know who
24 Deborah Crawford or Anil Gupta are -- is?

25 A. I know that Deborah Crawford worked with 01:43:37

1 our investors relation team at the time. 01:43:40

2 Q. And do you know Anil Gupta?

3 A. I believe he also worked with our
4 investor relations team.

5 Q. Okay. If you wanted to find out who 01:43:51
6 engaged in the revenue risk analysis, how would you
7 find that out?

8 A. For this particular one, I believe
9 Allison Hendrix may still work at Meta, so I might
10 reach out to her to understand more. 01:44:16

11 Q. Okay. And do you have an understanding
12 as to why this particular proposed change would
13 have a revenue impact at all?

14 A. Based on this email, it sounds like there
15 were some policy-violating custom audiences that 01:44:42
16 were created. It's possible that there were ads
17 set up with those custom audiences in the
18 targeting, and removing those custom audiences
19 would -- could have an impact to revenue.

20 MS. WEAVER: Okay. Thank you very much. 01:45:05
21 Please mark tab 24.

22 (Exhibit 370 was marked for
23 identification by the court reporter and is
24 attached hereto.)

25 Q. (By Ms. Weaver) Are you familiar with 01:45:21

1 partner categories? 01:45:22

2 A. Yes.

3 Q. And what are partner categories?

4 A. They were a targeting option we used to
5 offer that was based on data from third-party data 01:45:34
6 partners.

7 Q. And when you say "third-party data
8 partners," who do you mean?

9 A. There are a set of companies that have
10 access to information about people that advertisers 01:46:02
11 have used for targeting for both offline
12 advertising and online advertising.

13 Q. And what are the names of the companies?

14 A. There's a long list of companies, but
15 some that come to mind are Acxiom, Epsilon, 01:46:24
16 Experian, and Datalogics.

17 Q. Were they all data brokers?

18 MR. DAVIS: Objection. Form and scope.

19 THE DEPONENT: I think, internally,
20 we would -- we've referred to them as -- as "data 01:46:39
21 partners," but, you know, I think earlier I -- I
22 spoke about data brokers as companies who buy and
23 sell data, and I believe some of these businesses
24 had a similar business model.

25 Q. (By Ms. Weaver) Is there a list 01:46:58

1 somewhere of all of the companies who had partner 01:46:59
2 categories deprecated?

3 MR. DAVIS: Objection. Form and scope.

4 THE DEPONENT: Well, we -- we deprecated
5 partner categories altogether, so is your question, 01:47:23
6 is there a list somewhere of the partners with whom
7 we partnered with on -- on partner categories?

8 Q. (By Ms. Weaver) How many times can you
9 use the word "partner" in a sentence? That was
10 very good. But, yes, that's the question. 01:47:36

11 MR. DAVIS: Objection. Form and scope.

12 MS. WEAVER: Fair enough, Colin. I will
13 restate it.

14 Q. (By Ms. Weaver) Is it possible to
15 identify all of the companies who, at one point in 01:47:45
16 time, used partner categories?

17 MR. DAVIS: Objection. Scope.

18 THE DEPONENT: I would just clarify to
19 say it -- it should be possible to identify all of
20 the companies we worked with to provide partner 01:48:06
21 categories as a targeting option.

22 Q. (By Ms. Weaver) And did Facebook also
23 track revenue received from companies through
24 partner categories?

25 MR. DAVIS: Objection. Form. It's -- 01:48:26

1 form. 01:48:27

2 THE DEPONENT: Would you mind repeating
3 that question.

4 MS. WEAVER: No problem.

5 Q. (By Questioner) Did Facebook also 01:48:37
6 recognize revenue received from companies through
7 partner categories?

8 A. So -- so I think the question, as
9 phrased, does -- maybe doesn't make complete sense
10 because partner categories were one of many 01:49:12
11 ads-targeting options we offered in the past.

12 We make money via ads, and so, you know,
13 over -- over the years, we made money based on --
14 we made money from ads that included partner
15 categories in -- in -- as -- as one of their 01:49:37
16 targeting options.

17 Q. How many companies used partner
18 categories?

19 A. I don't know the total number offhand.

20 Q. Do you know roughly how many? 01:49:54

21 A. No.

22 MS. WEAVER: It possible to -- well,
23 strike that. Let's just move on.

24 Let's take a look at Exhibit 370, and for
25 the record, it's an email from Javier Olivan, 01:50:18

Page 145

1 Bate- -- with the Bates No. FB-CA-MDL-01191149 to 01:50:20
2 -53.

3 And while you're familiarizing yourself,
4 I will just read into the record the
5 earliest-in-time email from Javier Olivan to 01:50:35
6 Elisabeth Diana, Elliott Schrage, and a copy to
7 Sheryl Sandberg, and it says, "This is the
8 messaging we had during Mark's meeting today in the
9 deck (attached)."

10 Q. (By Ms. Weaver) Do you recognize 01:50:50
11 Exhibit 370?

12 A. I don't -- I don't recall this specific
13 email exchange.

14 Q. Okay. What is Exhibit 370?

15 A. It is an internal email about a 01:51:33
16 presentation deck.

17 Q. And do you see that the re line is:
18 "Need messaging for board's call deck tomorrow (by"
19 end of day)?

20 A. Yes. 01:51:55

21 Q. And do you understand that to be the
22 board of directors at Facebook?

23 MR. DAVIS: Object to the form.

24 THE DEPONENT: I'm not certain, but
25 that's a good guess. 01:52:02

1 Q. (By Ms. Weaver) And do you see the 01:52:03
2 attachment is labeled here, the email, as "Data
3 out_FB BOD March 2018," and then the string for the
4 PowerPoint?

5 A. Yes, I see that. 01:52:20

6 Q. Do you recall when the
7 Cambridge Analytica scandal broke?

8 MR. DAVIS: Object to the form.

9 THE DEPONENT: I recall news about
10 Cambridge Analytica in March of 2018. 01:52:35

11 Q. (By Ms. Weaver) [REDACTED]

12 [REDACTED]

13 [REDACTED]

14 MR. DAVIS: Objection. Form and scope.

15 THE DEPONENT: [REDACTED] [REDACTED]

16 [REDACTED]

17 [REDACTED]

18 [REDACTED]

19 [REDACTED] [REDACTED]

20 [REDACTED] [REDACTED]

21 [REDACTED]

22 [REDACTED]

23 [REDACTED]

24 [REDACTED]

25 [REDACTED] 01:53:37

1

■

■

■

■

■

■

8

MS. WEAVER: Thank you.

9

Q. (By Ms. Weaver) And, then, let's go to

10

the slide deck at the back -- or following the

01:54:09

11

email. It says, "Addressing Data Out/Data leaving

12

the platform."

13

Do you see that?

14

MR. DAVIS: Ms. Weaver, where?

15

MS. WEAVER: I am so sorry -- oh, you

01:54:25

16

know what? This is my fault. Is it?

17

Can we go off the record for just a

18

second? We just have an exhibit issue here.

19

THE VIDEOGRAPHER: We are off the record.

20

It's 1:54 p.m.

01:54:46

21

(Recess taken.)

22

THE VIDEOGRAPHER: We are back on the

23

record. It's 2:02 p.m.

24

(Exhibit 371 was marked for identification by

25

the court reporter and is attached hereto.)

02:02:05

Page 148

1 Q. (By Ms. Weaver) Ms. Lee, on the break, 02:02:07
2 we've marked Exhibit 371, which is the deck
3 attached to Exhibit 370 and referred to.

4 Do you recognize this deck?

5 A. Yes. 02:02:43

6 Q. What is it?

7 A. It's a deck outlining proposals for
8 making changes to our products as it relates use of
9 certain data.

10 Q. And turning to the second page of the 02:03:05
11 deck where it says "Agenda," it says, "This week
12 decision: Partner categories & Measurement."

13 Do you see that?

14 A. Yes.

15 Q. Did Facebook, at this time, also decide 02:03:18
16 to make changes to measurement?

17 MR. DAVIS: Objection. Scope.

18 THE DEPONENT: My understanding is that
19 we did.

20 Q. (By Ms. Weaver) And what changes did 02:03:31
21 Facebook make?

22 MR. DAVIS: Same objection.

23 THE DEPONENT: I -- I understand that we
24 looked at a number of measurement use cases and

25 made decisions to limit the kinds of data that were 02:03:47

Page 149

1 leaving our platform to support these measurement 02:03:51
2 use cases.

3 Q. (By Ms. Weaver) And what specific
4 measurement use cases did Facebook decide to limit?

5 MR. DAVIS: Objection. Scope. 02:04:05

6 THE DEPONENT: I can't recall the
7 specific use cases from memory.

8 Q. (By Ms. Weaver) Do you have a general
9 sense?

10 MR. DAVIS: Objection. Scope. 02:04:18

11 THE DEPONENT: At a very high level, I
12 think, previously, we were sharing data on both
13 impressions and clicks with certain measurement
14 partners, and I think, around this time period, we
15 made decisions to limit the extent to which that -- 02:04:53
16 that data was being a shared to our --

17 Q. (By Ms. Weaver) And which -- I'm sorry
18 about that. I thought you were done.

19 Which measurement partners are you
20 referring to? 02:05:09

21 MR. DAVIS: Objection. Scope.

22 THE DEPONENT: There were a number of
23 partners that advertisers were working with and
24 that they continued to work with that we were
25 sharing data with, so I don't know the full list of 02:05:34

1 partners. 02:05:39

2 Q. (By Ms. Weaver) Can you identify any of

3 them by name?

4 MR. DAVIS: Objection. Scope.

5 THE DEPONENT: I remember that Nielsen 02:05:48

6 Catalina was one of them.

7 Q. (By Ms. Weaver) Was Comscore one of

8 them?

9 MR. DAVIS: Same objection.

10 THE DEPONENT: I don't recall. 02:06:00

11 Q. (By Ms. Weaver) Do you recall any of

12 them other than Nielsen?

13 MR. DAVIS: Same objection.

14 THE DEPONENT: I think that Oracle was

15 one. 02:06:11

16 Q. (By Ms. Weaver) Any others?

17 MR. DAVIS: Same objection.

18 THE DEPONENT: No more than -- that I can

19 remember right now.

20 MS. WEAVER: Okay. And to address your 02:06:22

21 scope objection, Mr. Davis, if we turn to page 6,

22 we see that this document presents revenue

23 implications for these changes, and so I was

24 establishing foundation to ask questions about that

25 revenue calculation. 02:06:37

Page 151

1 Q. (By Ms. Weaver) So turning to page 6, do 02:06:40
2 you see where it says, "Revenue Implications,
3 Eliminate Partner Categories"?

4 A. Yes.

5 Q. And it says, "Estimated annualized total 02:06:50
6 risk of" \$500 million.

7 Do you see that?

8 A. Yes.

9 Q. And worse-case scenario is \$2.8 billion.

10 Do you see that? 02:07:02

11 A. Yes.

12 Q. Do you know how those revenue

13 calculations were performed?

14 A. Can -- is -- is there a specific aspect
15 of -- of how we arrived at the numbers that you are 02:07:20
16 interested in, just...

17 Q. I have no idea how it was calculated at
18 all, and so I'm trying to understand how that
19 revenue risk, ranging from \$500 million to
20 \$2.8 billion was estimated. 02:07:36

21 A. Uh-huh. I mentioned before that when we
22 consider the impact of different changes we might
23 make to our ads products, we work with a data
24 science team for a given product area to help us
25 analyze that impact, so I think this team would 02:08:03

Page 152

1 have had had ownership over -- over these numbers. 02:08:04

2 But in terms of, you know, the
3 assumptions we may have made to get to this range,
4 a certain amount of -- a number of ads in our
5 system would have included partner categories in 02:08:23
6 the targeting, and we would have needed to go
7 through an exercise of figuring out how much
8 revenue would be recoverable if we got rid of
9 partner categories as an option and how much of
10 that revenue would go away entirely. 02:08:44

11 So based on a -- different assumptions we
12 might make, that's how I understand we would have
13 got to this range.

14 Q. And it says, "Revenue risk is
15 concentrated in specific countries..." 02:08:59

16 Do you see that?

17 A. Yes.

18 Q. Does that mean -- does that refer to the
19 fact that the revenue is comp- -- coming from
20 companies who use partner categories in those 02:09:11
21 countries?

22 MR. DAVIS: Object to the form.

23 THE DEPONENT: Partner categories were
24 available for targeting ads to people in specific
25 countries only. 02:09:37

1 MS. WEAVER: Okay. 02:09:38

2 THE DEPONENT: And it's the countries
3 listed here. So if we got rid of partner
4 categories, then ad spend, based on showing ads to
5 people in specific countries, would be -- the risk 02:09:48
6 would be concentrated as -- as described.

7 Q. (By Ms. Weaver) And do you understand
8 that there was a -- a specific US revenue risk that
9 was an input into calculating the total risk and
10 worse-case scenario? 02:10:06

11 MR. DAVIS: Objection. Form.

12 THE DEPONENT: Could you clarify the
13 question.

14 MS. WEAVER: Yes. I will try it this
15 way. 02:10:28

16 Q. (By Ms. Weaver) Would it be fair to
17 believe that the revenue risk was calculated by
18 adding revenue risk in the US, plus revenue risk in
19 the UK, plus revenue risk in the countries listed
20 here? 02:10:43

21 MR. DAVIS: Objection. Form.

22 THE DEPONENT: Based on my understanding
23 of how our teams would typically look to identify
24 the total impact of -- of this kind of product
25 change, the first step would be looking at what are 02:11:09

Page 154

1 all the ads globally that use this type of 02:11:16
2 targeting, and we would first run a query of our --
3 all of our ads to identify those ads. Only after
4 that kind of question was answered -- What are the
5 ads globally that exist with this targeting? -- 02:11:41
6 would we then be able to see the country-level
7 breakdown.

8 Q. (By Ms. Weaver) Okay. And it would be
9 possible to isolate the revenue risk for just the
10 United States; is the right? 02:11:51

11 MR. DAVIS: Objection. Form.

12 THE DEPONENT: At the time of this
13 analysis, that would have been possible.

14 Q. (By Ms. Weaver) And do you have any
15 reason to think it's not possible today to obtain 02:12:02
16 information that would allow us to engage in the
17 process of identifying just the US revenue risk?

18 A. Well, in terms of identifying the risk, I
19 mean, we have now -- it's four years or so since we
20 deprecated the product, so the -- there's -- 02:12:36
21 there's sort of no more risk we sort of accounted
22 for any impact. Like, we've moved beyond the
23 impact of -- of the deprecation, so is there kind
24 of -- that being said, is there -- are there
25 specific related questions that you had? 02:12:57

Page 155

1 Q. Well, I hear what you are saying. You 02:12:59
2 are not actually answering my question.

3 A, the first question is: Is there any
4 reason to think Facebook does not possess documents
5 that reflects how these numbers were calculated at 02:13:09
6 the time?

7 MR. DAVIS: Objection. Form.

8 THE DEPONENT: Is -- is your question
9 whether we still have documents that explain how we
10 arrived at these numbers? 02:13:39

11 MS. WEAVER: Yes.

12 THE DEPONENT: Okay. I don't know if we
13 still have documents that -- that describe this.

14 Q. (By Ms. Weaver) Okay. With regard to
15 fallout from measurement changes, the estimate was 02:13:47
16 that the total risk ranged from 250 million to
17 1.5 billion, correct?

18 A. Yes.

19 Q. Was that global or for the US?

20 MR. DAVIS: Object to the form. 02:14:06

21 THE DEPONENT: My understanding -- based
22 on this document, my understanding of this would
23 have been a global estimate.

24 Q. (By Ms. Weaver) And so a moment ago you
25 seemed to imply that we now know the actual impact 02:14:21

1 of the deprecation of partner categories and the 02:14:25
2 fallout from these measurement changes; is that
3 fair?

4 A. Yes. I -- I -- I know that we do know
5 the impact of partner categories, and I assume we 02:14:37
6 know similar for the measurement changes.

7 Q. And what was the revenue impact of
8 partner categories?

9 A. The -- there was a -- an assessment of
10 the impact of the partner dep- -- sorry, the 02:14:57
11 partner categories deprecation done towards the end
12 of 2018 that showed that there was no statistically
13 significant difference in a change in spend when
14 looking at advertisers who had previously used
15 partner categories versus advertisers who never 02:15:20
16 used partner categories.

17 So the conclusion from that analysis was
18 that we were able to mitigate the revenue risk from
19 the partner categories deprecation; for example, as
20 described here, moving advertisers to different 02:15:39
21 targeting options and building new products for
22 those advertisers.

23 Q. And that was a mitigation effort,
24 correct?

25 A. Correct. 02:15:50

1 Q. And what about an actual estimate of the 02:15:53
2 fallout from the measurement changes?

3 A. I'm not familiar with any analysis
4 offhand, but I assume we would have done a
5 similar -- a -- a similar analysis. 02:16:08

6 Q. But you don't know, as you sit here
7 today, what that analysis yielded?

8 A. That's right, if such an analysis had
9 been done.

10 MS. WEAVER: Okay. All right. Let's 02:16:35
11 mark tab 25.

12 (Exhibit 372 was marked for
13 identification by the court reporter and is
14 attached hereto.)

15 MS. WEAVER: And then also tab 26 when 02:16:46
16 you are done marking 25.

17 MR. MELAMED: Tab 25 has been introduced
18 as Exhibit 372.

19 MS. WEAVER: And Exhibit 372, for the
20 record, is an email from Charlotte Narvaez to 02:17:13
21 herself and James Barnes dated on or about
22 March 27th, 2018.

23 Q. (By Ms. Weaver) When you have a moment,
24 let me know if you had a chance to review it.

25 A. Okay. I have reviewed it. 02:19:47

1 Q. What is Exhibit 372? 02:19:49

2 A. It seems to be a work-chat transcript

3 between two employees at Facebook.

4 Q. And who is Charlotte Narvaez?

5 A. She was a director on the signals product 02:20:07

6 team at that time, I believe.

7 Q. And what is "signals"?

8 A. It is one team within our ads product

9 organization.

10 Q. And who is James Barnes? 02:20:22

11 A. I believe that, at the time, he was a

12 product manager on Charlotte's team.

13 Q. And is she no longer with the company?

14 A. I think that she's still with Meta.

15 Q. And looking at the back of the document, 02:20:40

16 you see there's some attachments; is that right?

17 A. Yes.

18 Q. And do you recognize the deck that starts

19 at Bates No. -58 -- or, sorry, -59?

20 A. Yes. 02:21:01

21 Q. What is it?

22 A. It describes changes that we are making

23 with our targeting and measurement products.

24 Q. And do you know to whom this deck was

25 shown? 02:21:31

Page 159

1	A. I do not.	02:21:36
---	--------------	----------

2 Q. Okay. Let's go back to the chat, and
3 it's a chat, right? So it's moving consecutively
4 down. If we wanted to read it consecutively, we'd
5 start at the top and read down; is that right? 02:21:47

6	A. Yes.
---	---------

7 Q. Do you see where James Barnes writes
8 at -- on March 27th at 10:43:46, "we're killing
9 third party data onboarding"?

10	A. I see that.	02:22:03
----	----------------	----------

11 Q. What is he referring to there?

12 MR. DAVIS: Objection. Form and scope.

13 THE DEPONENT: I don't know what James
14 specifically is referring to with -- with that
15 message. 02:22:46

16 Q. (By Ms. Weaver) Okay. Is it possible
17 that he's referring to the deprecation of partner
18 categories?

19 MR. DAVIS: Same objection.

20 THE DEPONENT: It's possible. 02:22:57

21 Q. (By Ms. Weaver) Did -- have you ever
22 heard the phrase "third-party data onboarding"
23 before?

24 A. I -- I may have heard the phrase, but not
25 something that I have heard commonly. 02:23:16

1 Q. Okay. So here he writes, a little lower, 02:23:18
2 "so [REDACTED]" -- and if you go to
3 the next page -- "are going to have to find new
4 ways to send us data."

5 Do you see that? 02:23:32

6 A. Yes.

7 Q. Do you know if [REDACTED]
8 were sending Facebook data on or around this time?

9 A. Do I know --

10 MR. DAVIS: Objection. Scope. 02:23:43

11 THE DEPONENT: Was the question, if I
12 know if they were sending us data?

13 MS. WEAVER: Yes.

14 THE DEPONENT: I'm -- I'm not familiar
15 with whether they were or not. 02:23:52

16 MS. WEAVER: Okay. And just to address
17 the scope objections again, we are working toward
18 revenue impact of these changes.

19 Q. (By Ms. Weaver) Looking a little bit
20 lower, do you see where Barnes wrote, "i just 02:24:03
21 talked to jamie"?

22 A. Yes.

23 Q. Who is Jamie?

24 MR. DAVIS: Objection. Form.

25 THE DEPONENT: I am not sure which Jamie 02:24:22

Page 161

1 he is referring. 02:24:26

2 Q. (By Ms. Weaver) Okay. A little bit
3 lower, do you see at 10:46:04, Charlotte emailed,
4 "shared: PC & Measurement Proposal - Updated" with
5 "MZ decisions" PowerPoint. 02:24:35

6 Do you see that?

7 A. Yes.

8 Q. And then she wrote, "That is the Zuck
9 deck on third party data." "Can u review?"

10 Do you see that? 02:24:45

11 A. Yes.

12 Q. Do you know -- well, when it says,
13 "Updated with MZ decisions," does that mean the
14 deck was updated with decisions of Mark Zuckerberg?

15 MR. DAVIS: Objection. Form. 02:24:59

16 THE DEPONENT: I am not sure of whether
17 the title of this doc meant that the deck was
18 actually updated with the decisions of
19 Mark Zuckerberg.

20 Q. (By Ms. Weaver) But do you understand MZ 02:25:18
21 to refer to Mark Zuckerberg?

22 A. Yes.

23 MR. DAVIS: Objection. Form.

24 Q. (By Ms. Weaver) And let's turn now to
25 the page at the bottom there. It says -- 02:25:29

Page 162

1 James Barnes says, "i'm with the data partnerships 02:25:41
2 team" -- "team," "there's some confusion," "a
3 meeting later today where they'll clarify," and
4 later he texted, "i just talked to kristy -
5 apparently the decision currently is to kill 02:25:52
6 managed ca's."

7 Does that refer to "custom audience"?

8 A. Managed custom audiences, yes.

9 Q. "For two reasons:"

10 "1." because custom audience "data was 02:26:04
11 uploaded via the acxiom onboarder (old acxiom tool
12 that existed before we did multi-key matching) - i
13 think this reasoning is weak; they could have
14 onboarded directly to us with hiher [sic] match
15 rates." 02:26:18

16 "2. because we want a more direct
17 representation from the client that they have the
18 right to use the data."

19 Do you see that?

20 A. Yes. 02:26:26

21 Q. And is this the same deprecation of
22 partner categories we were discussing earlier, or
23 is this different?

24 MR. DAVIS: Objection. Form.

25 THE DEPONENT: This is different. 02:26:42

Page 163

1 Q. (By Ms. Weaver) And turning to 02:26:42
2 page ending in -- or looking at the page -- top of
3 page 4, it says -- I'm sorry. Mr. Barnes wrote,
4 "so bruce's world isn't under consideration."
5 Charlotte writes, "Aggregator?" 02:26:58
6 And he writes, "acxiom, odc, experian,
7 etc."
8 Do you see that?
9 A. Yes.
10 Q. And do you have an understanding as to 02:27:07
11 what they're communicating to each other in that
12 sequence?
13 A. The -- the question is whether I have an
14 understanding about what they're communicating
15 about? 02:27:21
16 Q. Yeah.
17 Do you know who Bruce is? What does she
18 mean when she says "Aggregator," et cetera?
19 A. I --
20 MR. DAVIS: Object to form. 02:27:30
21 THE DEPONENT: I do not know who Bruce is
22 or what "Aggregator" refers to here.
23 Q. (By Ms. Weaver) Okay. And then
24 Charlotte writes, [REDACTED]
[REDACTED] "Should 02:27:49

1 stay." "I can help push for that." 02:27:53

2 Do you see that?

3 A. Yes.

4 Q. Do you know if Facebook [REDACTED]

5 [REDACTED] 02:27:59

6 MR. DAVIS: Objection. Scope.

7 THE DEPONENT: I -- your -- your question

8 was whether we aggregated [REDACTED]

9 [REDACTED]

10 Q. (By Ms. Weaver) Sorry. If Facebook 02:28:43

11 deprecated the practice she's describing, which is

12 [REDACTED]

13 [REDACTED]

14 MR. DAVIS: Objection. Form and scope.

15 THE DEPONENT: I am -- I -- I do not know 02:29:02

16 if we deprecated what she describes here.

17 Q. (By Ms. Weaver) Okay. Let's move to the

18 deck, and looking at the page ending -359, it says,

19 "3rd Party Data Ecosystem Changes: Partner

20 Categories & Measurement," right? 02:29:20

21 A. Yes.

22 Q. And the next slide says, "North star:

23 Facebook does not buy or sell your data. Facebook

24 is leading the industry."

25 Do you see that? 02:29:31

Page 165

1	A. Yes.	02:29:32
---	---------	----------

2	Q. What does "North star" mean?
---	---------------------------------

3 MR. DAVIS: Object to the form.

4 THE DEPONENT: In the context of some of

```
5 | these -- when we -- when we use this term in 02:29:50
```

6 business presentation, it refers to a vision that

7 | we wish to achieve.

8 Q. (By Ms. Weaver) But not something that

9 | has occurred; is that right?

10	A. It depends on the context.	02:30:08
----	-------------------------------	----------

11 Q. Here, at the time, could Facebook

12 equivocally say it did not buy or sell data --

```
13 | user's data?
```

14 A. Sorry. Your question was, could we

15 unequivocally say that we did not -- 02:30:20

16 Q. That -- yeah, let me ask the question

17	again.
----	--------

18 At this point in time of this deck where

19 | it is saying it is a north star that Facebook does

20	not buy or sell your data, was it unequivocally	02:30:30
----	---	----------

21 true that Facebook was not buying or selling user

22	data?
----	-------

23 MR. DAVIS: Objection. Form.

24 THE DEPONENT: We weren't selling data.

25	We did have partnerships in place with companies	02:30:52
----	--	----------

1 like Experian and Acxiom where we were paying them 02:31:00
2 to be able to offer targeting categories based on
3 their user data.

4 So one of the key reasons for us

5 deprecating products like [REDACTED] [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

9 Q. (By Ms. Weaver) Looking to the next page
10 ending at -361, it says, "Actions we are taking. 02:31:41
11 Data in," and it lists "Partner Categories" and
12 "Lighthouse."

13 Do you see that?

14 A. Yes.

15 Q. What is "Lighthouse"? 02:31:54

16 MR. DAVIS: Objection. Scope.

17 THE DEPONENT: This was a program we had
18 in place where we were using data from similar
19 partners as we worked with on partner categories,
20 using this data in our ads delivery systems to show 02:32:14
21 ads to people.

22 Q. (By Ms. Weaver) When you say "similar
23 partners," what do you mean?

24 A. So I don't know whether the Lighthouse
25 partners were exactly the same as the tar- -- 02:32:35

Page 167

1 partner categories partners. But, for example, if 02:32:37
2 we were similar to how we were offering targeting
3 options based on data from a partner like Acxiom,
4 for example, the idea behind Lighthouse is we would
5 use similar data and apply it to our ads delivery 02:33:01
6 models to increase the relevance of -- of ads we
7 showed to people.

8 Q. What companies were partners in
9 Lighthouse?

10 MR. DAVIS: Objection. Scope. 02:33:14

11 THE DEPONENT: I don't know offhand the
12 list of companies.

13 Q. (By Ms. Weaver) How would I find out the
14 list of companies involved in Lighthouse?

15 MR. DAVIS: Objection. Scope. 02:33:26

16 THE DEPONENT: Fred Leach might know.

17 Q. (By Ms. Weaver) Who is Fred Leach?

18 A. He was working with our data partnerships
19 team at this time.

20 Q. Is he still at Facebook? 02:33:43

21 A. Yes.

22 Q. And do you see next to "Lighthouse," it
23 says, [REDACTED]

24 [REDACTED], " and then

25 it -- for "Actions We Agree On," it says, "[REDACTED]" 02:33:56

1 [REDACTED] ." 02:33:59

2 Do you see that?

3 A. Yes.

4 MR. DAVIS: Objection. Scope.

5 Q. (By Ms. Weaver) And what is "[REDACTED]" 02:34:06

6 MR. DAVIS: Objection. Scope.

7 THE DEPONENT: I'm not sure what this

8 refers to here.

9 Q. (By Ms. Weaver) Do you know what

10 [REDACTED] means at Facebook? 02:34:30

11 MR. DAVIS: Objection. Scope.

12 THE DEPONENT: It -- it could mean

13 different things, depending on the context.

14 Q. (By Ms. Weaver) Okay. Why don't you

15 identify what -- any understanding of what 02:34:48

16 [REDACTED]

17 [REDACTED] [REDACTED]

18 [REDACTED]

19 [REDACTED]

20 MR. DAVIS: Same objection. And form. 02:35:03

21 THE DEPONENT: That -- that wouldn't be

22 one of the first things that -- first things that

23 come to mind as I think about the ways --

24 Q. (By Ms. Weaver) What do you understand

25 "[REDACTED]" means in this sentence where it says, 02:35:32

1 " [REDACTED] 02:35:34

2 MR. DAVIS: Ms. Weaver, I don't mean to
3 interrupt, but you need to let the witness finish
4 her answer. I think you stepped on the end of that
5 answer. 02:35:45

6 MS. WEAVER: Oh, I'm sorry.

7 THE DEPONENT: I think the question was,
8 what -- what do I understand the -- the use of
9 the iden- -- the word "[REDACTED]" to mean?

10 MS. WEAVER: Let me restate the question. 02:35:57

11 Q. (By Ms. Weaver) What do you understand
12 the word "[REDACTED]" to mean in the sentence where
13 it says, "[REDACTED]"

14 [REDACTED]

15 MR. DAVIS: Objection. Scope. Form. 02:36:08

16 THE DEPONENT: Based on this document and
17 some of the discuss- -- discussion of matching in
18 the chat thread earlier on in the document, I am
19 interpreting that [REDACTED]

20 [REDACTED] [REDACTED]

21 [REDACTED]

22 [REDACTED]

23 [REDACTED]

24 [REDACTED]

25 Q. (By Ms. Weaver) When you said the phrase 02:37:15

Page 170

1 [REDACTED] what did 02:37:15

2 you mean when you said "[REDACTED]"

3 MR. DAVIS: Objection. Scope.

4 THE DEPONENT: [REDACTED]

[REDACTED] [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] [REDACTED]

[REDACTED]

22 Q. (By Ms. Weaver) Would it almost be fair

23 to say "[REDACTED]"

24 MR. DAVIS: Objection. Form. Scope.

25 THE DEPONENT: I'm hesitating because it 02:39:23

Page 171

1 feels like we are talking a bit about some abstract 02:39:25
2 concepts, but I think the -- the important thing is
3 [REDACTED]
4 [REDACTED]
5 [REDACTED] [REDACTED] [REDACTED]
6 [REDACTED]
7 [REDACTED]
8 [REDACTED]
9 [REDACTED]
10 [REDACTED]
11 [REDACTED]
12 [REDACTED]
13 MS. WEAVER: Got it.
14 Q. (By Ms. Weaver) Now, here it also says,
15 "Data Out - Measurement," and it lists "Sales 02:40:22
16 lift," "Multi-Touch Attribution," "Mobile
17 Measurement Partners," and "Order Level Reporting."
18 Do you see that?
19 A. Yes.
20 Q. Are those four different kinds of 02:40:35
21 measurement projects?
22 MR. DAVIS: Objection. Scope.
23 THE DEPONENT: They are four different
24 kinds of measurement, yes.
25 Q. (By Ms. Weaver) So what is "Sales lift"? 02:40:55

1 MR. DAVIS: Objection. Scope. 02:40:59

2 THE DEPONENT: My understanding of this
3 is advertisers -- some advertisers want to connect
4 their online ad spend with sales that actually
5 happen in stores, and this is a method for them to 02:41:11
6 do that.

7 Q. (By Ms. Weaver) And it says provide --
8 when it says "Data Out," does that mean Facebook
9 was sending data out for measurement?

10 MR. DAVIS: Objection. Scope. Form. 02:41:26

11 THE DEPONENT: My -- my understanding,
12 which is mostly based on the second column on this
13 side, is that for these measurement products, we
14 were providing measurement partners with specific
15 types of ad data linked to people who saw ads. 02:41:45

16 Q. (By Ms. Weaver) And, then, turning to
17 the page ending at -363, do you see the "Revenue
18 Implications" at the top here?

19 A. Yes.

20 Q. And it -- at least my copy -- yeah, so 02:42:13
21 this copy is sort of printed over. I would like to
22 just ask you to look at the page ending with Bates
23 No. -368 and also -369, but let's start with -368.
24 It says, "Impact analysis: Eliminating PC Data
25 Broker Measurement." 02:42:40

Page 173

1 Do you see that? 02:42:41

2 A. Yes.

3 Q. Do you know what "PC" stands for?

4 A. I understand this refers to partner

5 categories. 02:42:57

6 Q. And so here it identifies Oracle, Nielsen

7 Catalina, and Acxiom; is that right?

8 A. Yes.

9 Q. And, then, turning to the next page, it

10 says, "Impact analysis: Eliminating ALL Data 02:43:07

11 Broker Measurement."

12 Do you see that?

13 A. Yes.

14 Q. And, there, PC partners MTA, MMP, OLR are

15 identified on the left. 02:43:22

16 Do you see that?

17 A. Yes.

18 Q. And do you know what "PC Partners" is?

19 A. I would assume it refers to partners we

20 worked on partner categories. 02:43:41

21 Q. And then what does "MTA" refer to?

22 A. "Multi-touch attribution."

23 Q. And what does "MMP" refer to?

24 A. "Mobile measurement partners."

25 Q. And what does "OLR" refer to? 02:43:54

Page 174

1 A. "Order-level reporting." 02:43:56

2 Q. And do you know if all of those were
3 eliminated?

4 MR. DAVIS: Objection. Scope.

5 MS. WEAVER: Let me ask a better 02:44:08
6 question.

7 Q. (By Ms. Weaver) Do you know if the
8 practices for the entities identified here with
9 regard to data broker measurement were all
10 deprecated, or was only a portion of them 02:44:18
11 deprecated?

12 MR. DAVIS: Objection. Scope and form.

13 THE DEPONENT: My understanding is that
14 for multi-touch attribution, mobile measurement
15 partners, and order-level reporting, we did not 02:44:36
16 deprecate these measurement types entirely but,
17 instead, made some changes to the data we shared
18 with partners to support these types of
19 measurement.

20 Q. (By Ms. Weaver) And so only PC partners 02:44:57
21 were deprecated entirely; is that right?

22 MR. DAVIS: Objection. Scope.

23 THE DEPONENT: On this slide, partner
24 categories, as a targeting option, was deprecated
25 entirely. I believe that order-level reporting may 02:45:15

Page 175

1 have been deprecated as well, but I'm not 02:45:22

2 100 percent sure.

3 MS. WEAVER: So let me ask a better

4 question.

5 Q. (By Ms. Weaver) So for PC partners, 02:45:31

6 reading across the row there, it says, "User level

7 data shared," and it says "Impressions."

8 That reflects that impressions were

9 shared to partner category partners; is that right?

10 MR. DAVIS: Objection. Scope. Form. 02:45:46

11 THE DEPONENT: I believe that what

12 this -- that first row says is that, for partner

13 categories partners, we shared with them the number

14 of ad impressions that were run that use partner

15 categories in the targeting. 02:46:23

16 Q. (By Ms. Weaver) And, then, there were

17 138 of those partner category partners; is that

18 right?

19 MR. DAVIS: Objection. Form. Scope.

20 THE DEPONENT: Just -- I guess before I 02:46:36

21 address that question, I should say that what I

22 just mentioned, that my interpretation of that

23 first row is just my interpretation. I'm not

24 100 percent sure -- certain on what the first row

25 is definitely trying to say. 02:46:57

Page 176

1 Q. (By Ms. Weaver) Okay. Do you see the 02:47:01
2 column that says, number "of advertisers using"
3 measurement?

4 A. Yes.

5 Q. What do you understand that column to 02:47:06
6 mean?

7 MR. DAVIS: Objection. Form and scope.

8 THE DEPONENT: So -- sorry. I'm just
9 looking at the previous slide as well.

10 So, in general, for this table, I 02:47:45
11 interpret that second column -- well, in -- in
12 general, for this table, three out of the four
13 things in the first column are types of

14 measurement -- MTA, MMP, and OLR -- and then that
15 column that says number "of advertisers using" 02:48:02
16 measurement should represent the number of
17 advertisers on Facebook using that type of
18 measurement. I am confused about the first row
19 that says "PC Partners" because I -- I am not

20 familiar with PC partners as being a type of 02:48:16
21 measurement. You may describe a type of
22 measurement that I'm just not familiar with.

23 That's why I was a little bit confused in the
24 previous --

25 MS. WEAVER: Got it. And I think I can 02:48:28

1 help you. 02:48:30

2 Q. (By Ms. Weaver) If you go to the page

3 ending at -361, where it says, "Data Out -

4 Measurement," do you see where it says, "Sales Lift

5 (PC partners + some others)"? 02:48:38

6 A. Yes.

7 Q. So is it possible that PC partners here

8 means PC partners plus some others who are using

9 sales lift?

10 MR. DAVIS: Objection. Form and scope. 02:48:54

11 THE DEPONENT: Going back to that page --

12 MS. WEAVER: -369?

13 THE DEPONENT: Yes. It is -- it is

14 possible that that first row represents, like,

15 the -- the first row that -- that -- that -- the 02:49:16

16 measurement product represented in that first row

17 is the sales lift.

18 MS. WEAVER: Fabulous.

19 THE DEPONENT: I would be guessing, but

20 that would make more sense -- 02:49:28

21 MS. WEAVER: Okay.

22 THE DEPONENT: -- PC partners.

23 Q. (By Ms. Weaver) And, then, do you see

24 the column that says "annual" revenue "directly

25 measured"? 02:49:34

1 A. Yes. 02:49:36

2 Q. And the "total annual" revenue "of
3 advertisers," and then "total" avenue -- "annual"
4 revenue "of advertisers (as" percentage "of"
5 Facebook "Revenue)."

02:49:45

6 Do you see those three columns?

7 A. Yes.

8 Q. When it says "annual" revenue "directly
9 measured," is that the revenue of the advertisers
10 or of Facebook?

02:49:53

11 You're the mathematician, but I guess
12 what I'm asking: Is 469 million 8 percent of
13 3 billion?

14 Do you understand what I'm saying?

15 MR. DAVIS: Ob- -- object to the form. 02:50:19

16 MS. WEAVER: I'll do a colloquy, and then
17 I'll try to ask you a clean question.

18 Q. (By Ms. Weaver) It looks to me like
19 annual revenue directly measured is Facebook's
20 revenue. The next column is the total annual of 02:50:28
21 advertiser revenue, and then a calculation was
22 performed to see the total annual revenue of
23 advertisers as a percentage of Facebook revenue and
24 so that if you wanted to look at Facebook's revenue
25 impact, you would take 28 percent of 13 billion. 02:50:43

Page 179

1 MR. DAVIS: Object to the form. 02:50:51

2 Q. (By Ms. Weaver) So you can think about
3 it. Let me know when you're ready to talk, and
4 I'll ask you a question.

5 A. I think I was confused by your 02:50:58
6 description of those columns.

7 Q. Okay.

8 A. Would it help if I --

9 Q. Yes.

10 A. -- describe my interpretations of the 02:51:06
11 columns?

12 MR. DAVIS: Ms. Lee, there's -- there's
13 no pending question. Why don't you --

14 THE DEPONENT: Okay.

15 MR. DAVIS: -- wait for Ms. Weaver to ask 02:51:10
16 you a question.

17 THE DEPONENT: Could you rephrase the
18 question.

19 Q. (By Ms. Weaver) Will you please tell me
20 what you understand "annual revenue directly 02:51:15
21 measured" means?

22 MR. DAVIS: Objection. Form.

23 THE DEPONENT: My interpretation of this
24 column is this is the amount of revenues from
25 advertisers using this measurement product that is 02:51:35

Page 180

1 measured by these measurement products. 02:51:40

2 Q. (By Ms. Weaver) Okay. And, then, what
3 does "total annual revenue of advertisers" mean?

4 MR. DAVIS: Object to the form.

5 THE DEPONENT: My interpretation of this 02:51:52

6 table in that column is that this represents the

7 total Facebook revenue from advertisers using these

8 measurement products, so an advertiser could be

9 spending -- spending money on Facebook ads, but

10 only a portion of those ads are actually running 02:52:21

11 through these specific measurement products, and

12 that is why the numbers in the "annual" revenue

13 "directly measured" column are smaller than the

14 "total annual" revenue "of advertisers" column.

15 MS. WEAVER: Understood. 02:52:37

16 Q. (By Ms. Weaver) And so the total annual
17 revenue of the advertisers attributable to these
18 measurement processes is 28 percent of 13 billion;
19 is that right?

20 MR. DAVIS: Object to the form. 02:53:03

21 THE DEPONENT: Did -- could you repeat
22 that. I -- I don't think I quite understand.

23 Q. (By Ms. Weaver) Okay. What do you
24 understand the 28 percent to reflect?

25 A. I would assume that represents the total 02:53:21

Page 181

1 revenue from these advertise- -- the total revenue 02:53:32
2 from these advertisers as a percentage of total
3 Facebook revenue. So it -- 13 billion should be
4 28 percent of total Facebook revenue for this time
5 period. 02:53:51

6 Q. Thank you.

7 Looking on the next page, do you have an
8 understanding as to -- well, strike that.

9 Do -- do you see that there's a slide
10 that says, "Regional Specific Risk re: 02:54:08
11 Measurement" --

12 A. Yes.

13 Q. -- North America?

14 A. Yes.

15 Q. What's your understanding of what this 02:54:16
16 slide is referring to?

17 MR. DAVIS: Objection. Scope. Form.

18 THE DEPONENT: It seems to refer to risk
19 specific to North America as a result of moving
20 forward with these measurement product changes. 02:54:44

21 MS. WEAVER: Okay. Great.

22 I think we can take a break if you'd like
23 to, or we can continue if you would like to.

24 MR. DAVIS: I would like to take a break,
25 if possible. 02:54:59

Page 182

1 MS. WEAVER: Okay. No problem. 02:55:01
2 (Discussion off the stenographic record.)
3 MS. WEAVER: We can go off the record.
4 THE VIDEOGRAPHER: Okay. We are off the
5 record. It's 2:55 p.m. 02:55:11
6 (Recess taken.)
7 THE VIDEOGRAPHER: We are back on the
8 record. It's 3:12 p.m.
9 (Exhibit 373 was marked for
10 identification by the court reporter and is 03:12:35
11 attached hereto.)
12 (Exhibit 374 was marked for
13 identification by the court reporter and is
14 attached hereto.)
15 MS. WEAVER: In the break, Ms. Lee, we 03:12:37
16 marked Exhibits 373 and 374.
17 374 is a native document attached to 373.
18 Why don't you take a look at Exhibit 373 first and
19 then we can pull up the native file, which is
20 rather large, afterwards. 03:12:55
21 For the record, Exhibit 373 bears Bates
22 Nos. FB-CA-MDL-03055702 to -06. It's a June 24,
23 2018 email from Kito Chen, and the subject is:
24 "A/C" privilege "RFI's to apps/developers this
25 week." 03:13:23

Page 183

1 Q. (By Ms. Weaver) And just let me know 03:13:28
2 when you have had a moment to review it, Ms. Lee.
3 A. Okay.
4 Q. Have you seen Exhibit 373 before?
5 A. Yes. 03:14:59
6 Q. And what is it -- I'm sorry.
7 A. Sorry. Could you repeat your -- your
8 question.
9 Q. What is it?
10 A. This is an internal email from Kito Chen. 03:15:12
11 Q. And who is Kito Chen?
12 A. I -- I don't know what her role was at
13 this -- at the time of this email.
14 Q. What is her role now?
15 A. Also not sure of her role right now. 03:15:33
16 Q. She's somebody who works at Facebook; is
17 that fair?
18 A. I know that she did work at Facebook
19 previously. I -- I don't know if she still works
20 at -- at Facebook. 03:15:50
21 Q. And you see that the subject matter of
22 this is "RFI's to apps/developers this week"?
23 Do you see that?
24 A. Yes.
25 Q. Does "RFI" refer to "request for 03:16:01

Page 184

1 information"? 03:16:03

2 MR. DAVIS: Objection. Form.

3 THE DEPONENT: Based on this email, that

4 is what it stands for.

5 Q. (By Ms. Weaver) Did you review this 03:16:15

6 email in preparation for your deposition today?

7 A. I -- I saw this email, but I did not

8 review it in detail.

9 Q. And did you see that there was an

10 attachment to it as well? 03:16:29

11 A. I don't recall the attachment.

12 Q. And did you discuss this email with

13 anybody?

14 MR. DAVIS: Objection --

15 THE DEPONENT: We were -- 03:16:41

16 MR. DAVIS: Just -- just --

17 MS. WEAVER: Sorry. Let me finish the

18 question, Colin. I apologize.

19 Q. (By Ms. Weaver) Did you discuss this

20 email with anybody in preparation for your 03:16:46

21 deposition?

22 MR. DAVIS: And, Ms. Lee, I just would

23 caution you not to disclose any

24 attorney-client-privileged communications in

25 response to the question. It's fine to answer that 03:16:58

Page 185

1 question "yes" or "no." 03:17:01

2 THE DEPONENT: Yes.

3 Q. (By Ms. Weaver) Who did you -- did you
4 discuss it with anyone other than a lawyer?

5 A. No. 03:17:11

6 Q. Did you take any steps to speak to
7 anybody on this email or who might have knowledge
8 of the subject matter of the email?

9 A. Yeah.

10 MR. DAVIS: Objection. Form. 03:17:23

11 Q. (By Ms. Weaver) Are you aware of whether
12 or not Facebook engaged in a process of
13 investigating apps following the
14 Cambridge Analytica scandal?

15 MR. DAVIS: Objection. Scope. 03:17:34

16 THE DEPONENT: I'm -- I had a -- I have a
17 high-level awareness that it occurred, but I'm not
18 familiar with details.

19 Q. (By Ms. Weaver) And are you aware that
20 requests for information were sent to apps and 03:17:52
21 advertisers following the Cambridge Analytica
22 scandal?

23 MR. DAVIS: Objection. Scope.

24 THE DEPONENT: I was not aware that this
25 happened. 03:18:02

Page 186

1 Q. (By Ms. Weaver) Looking at the document, 03:18:05
2 do you see where it says, "1. Direct revenue
3 attribution logged in GMS data (with these apps
4 identified the 'source apps')"?

5 A. Yes. 03:18:19

6 Q. What is "GMS data," if you know?

7 A. I -- I don't know for certain, but I --
8 my guess is that it refers to data that our sales
9 team tracks for quota and revenue achievement
10 purposes. 03:18:46

11 Q. And do you know what "GMS" stands for?

12 A. My guess is that it would stand for
13 "global marketing solutions," which is the -- was
14 the name of our larger sales and marketing
15 organization. 03:19:02

16 Q. And looking at the names of the people on
17 this email, are they in -- part of the global
18 marketing solutions organization?

19 MR. DAVIS: Objection. Form.

20 THE DEPONENT: I don't know most of the 03:19:26
21 people on the email thread.

22 Q. (By Ms. Weaver) Do you know if any of
23 the people on the email thread -- thread were
24 tasked with the responsibility of investigating
25 apps and advertisers following the 03:19:38

Page 187

1 Cambridge Analytica scandal? 03:19:43

2 MR. DAVIS: Objection. Form and scope.

3 THE DEPONENT: I don't have any knowledge
4 of that being done.

5 Q. (By Ms. Weaver) Do you know -- do you 03:19:56
6 recognize the name of anyone who was copied or --
7 strike that.

8 Other than Kito Chen, do you recognize
9 the name of anyone on this email string?

10 A. Yes. 03:20:08

11 Q. Who?

12 A. Thomas Horton and Jon Park.

13 Q. Who is Thomas Horton?

14 A. He -- I -- I know he used to work on the
15 BP&O team, the analytics team from our sales org. 03:20:25
16 I'm not sure if he's still in that role.

17 Q. And how about Jon Park?

18 A. I know he, in the past, had worked on our
19 partnerships team.

20 Q. Okay. And going back to the phrase "GMS 03:20:43
21 data," you said you thought that refer- -- referred
22 to the global marketing sales team.

23 What data for the global marketing sales
24 do you understand this might be referring to?

25 MR. DAVIS: Objection. Form. 03:21:10

Page 188

1 THE DEPONENT: I -- I had said that I 03:21:11
2 think GMS stands for "global marketing solutions."
3 MS. WEAVER: Sorry, solutions, yes.
4 THE DEPONENT: Which -- which was the
5 name of our broader sales team, and could -- could 03:21:18
6 you repeat the -- the latter part of your question?
7 MS. WEAVER: Sure.
8 Q. (By Ms. Weaver) It says, "Direct revenue
9 attribution logged in" global marketing solutions
10 "data..." 03:21:32
11 What does "data" mean there?
12 MR. DAVIS: Objection. Form.
13 THE DEPONENT: So I understand the sales
14 org, and the BP&O team specifically tracks certain
15 information for the sales organizations purposes. 03:21:51
16 So they need to, for example, track ads revenue to
17 understand a sales team's achievement as revenue
18 achievement as compared to their quarterly quotas,
19 for example. So GMS data would include metric
20 like -- metrics like those. 03:22:17
21 Q. (By Ms. Weaver) So if I wanted to
22 identify revenue associated with all of the apps
23 and advertisers investigated following the
24 Cambridge Analytica scandal, would I find it in GMS
25 data? 03:22:31

Page 189

1 MR. DAVIS: Objection. Form and scope. 03:22:33

2 THE DEPONENT: I don't know for -- for
3 certain.

4 Q. (By Ms. Weaver) And if I wanted to
5 calculate the revenue impact of any depreciation 03:22:43
6 arising out of the Cambridge Analytica scandal with
7 regard to apps or advertisers following an inquiry
8 and perhaps depreciation of access to certain data,
9 would the revenue information I would need to do to
10 perform that calculation be in GMS data? 03:23:04

11 MR. DAVIS: Objection. Form and scope.

12 THE DEPONENT: It was a bit of a long
13 question. Could you repeat -- I think that -- what
14 you're -- what you're interested in? I think I --

15 MS. WEAVER: Sure. 03:23:25

16 THE DEPONENT: -- lost the --

17 Q. (By Ms. Weaver) If I wanted to calculate
18 the revenue impact of deprecating apps and
19 advertisers following the inquiry that came out of
20 Cambridge Analytica, could I identify the revenue 03:23:41
21 associated with deprecated apps and advertisers in
22 GMS data?

23 MR. DAVIS: Objection. Form and scope.

24 THE DEPONENT: Could you clarify what you
25 mean by "deprecating apps and advertisers"? 03:23:56

Page 190

1 Q. (By Ms. Weaver) Do you have -- fair 03:24:02
2 enough.
3 Are you aware that following the
4 Cambridge Analytica scandal, access to certain data
5 to certain apps and advertisers was cut off? 03:24:13
6 MR. DAVIS: Objection. Form and scope.
7 THE DEPONENT: I am not aware of any
8 specific cases where that happened.
9 Q. (By Ms. Weaver) Okay. Do you see where
10 it says here, "Total revenue impact between 03:24:35
11 2017-01-01 till 2018-06-20 is about" 73 million?
12 A. Yes.
13 Q. And what do you understand "total revenue
14 impact" to mean here?
15 MR. DAVIS: Objection. Form. 03:24:56
16 THE DEPONENT: It's hard to -- it's hard
17 for me to interpret the meaning of it just from
18 this meaning, what -- what the -- what this impact
19 refers to specifically.
20 Q. (By Ms. Weaver) Do you see where it says 03:26:07
21 "API" actions "data"?
22 Okay. Let's try this: See in Bullet
23 Point 2 where it says, "Connection to advertisers
24 via API actions between apps and pages (API action
25 data from all available" historical "data between 03:26:26

Page 191

1 2017" to 2 -- sorry, it's February 7th, 2017 until 03:26:31
2 June 20th, 2018. "If we were to take actions on
3 these apps (e.g. suspending their access), these
4 advertisers might lose some functionalities of
5 accessing, editing or managing their pages." 03:26:46

6 Do you see that?

7 A. Yes.

8 Q. So do you understand that one approach
9 here in calculating revenue impact is to look at
10 the impact of suspending their access to data? 03:26:58

11 MR. DAVIS: Objection form. Scope.

12 THE DEPONENT: I guess I don't have much
13 context on this overall issue, apart from what is
14 in this email, so it would be possible for me to
15 make some guesses to what were the assumptions 03:27:30
16 behind the revenue impact analysis here, but they
17 would just be some -- it would just be conjecture
18 on my part.

19 Q. (By Ms. Weaver) Okay. And then your
20 part -- Facebook's part it would be conjecture? 03:27:44

21 MR. DAVIS: Objection. Form.

22 Q. (By Ms. Weaver) And you -- you possess
23 this document, but you didn't speak to anybody
24 about it or attempt to understand what revenue
25 impact is being calculated here; is that right? 03:27:59

Page 192

1 MR. DAVIS: Objection. Form. 03:28:03

2 THE DEPONENT: That's correct.

3 Q. (By Ms. Weaver) Looking below, do you

4 see where it says, in 2e, "The attached Excel file

5 allows us to filter by either app or advertisers to 03:28:18

6 see associated API connections"?

7 Do you see that?

8 A. Yes.

9 Q. And it says, "Some of the impacted

10 advertisers are large GSO clients - e.g., Samsung, 03:28:30

11 Unilever, etc."

12 Do you see that?

13 A. Yes.

14 Q. And then it lists a couple of queries

15 there with junk sites. 03:28:41

16 Do you see that?

17 A. Yes.

18 MS. WEAVER: Let's take a look at what

19 has been marked as Exhibit 374. And it may be too

20 large for you to look at. 03:29:11

21 And if that's the case, Colin, we can

22 email it to the witness.

23 THE DEPONENT: It does give me an option

24 to download it.

25 MS. WEAVER: Okay. Perfect. 03:29:18

Page 193

1 THE DEPONENT: I have the file open. 03:29:24

2 Q. (By Ms. Weaver) Okay. And do you see
3 where it says, on the cover page tab, "Two
4 Different Methodologies to assess potential impact:
5 1 Direct revenue attribution (application is
6 identified as source app in GMS data)," and "2 API
7 actions between applications and pages) owned by
8 advertisers)..."

9 Do you see that?

10 A. Yes. 03:29:52

11 Q. And if you go to the second tab, you see
12 "List of Apps"; is that right?

13 A. Yes.

14 Q. And do you understand this to be the list
15 of apps that was identified as having received 03:30:02
16 RFIs?

17 MR. DAVIS: Objection. Form. Scope.

18 Q. (By Ms. Weaver) And if it -- if you are
19 confused, you can go back to the last exhibit, and
20 on the page ending in -704 in Exhibit 373, it lists 03:30:32
21 the apps that it identified as seeing RFIs that are
22 a part of this analysis.

23 A. I do see the list of -- I do see a list
24 of apps in the original email described as the apps
25 that someone was planning to send RFIs to. This 03:31:03

Page 194

1 list in the Excel file looks longer. So I'm not 03:31:17
2 sure what the list in the Excel file represents
3 exactly.

4 Q. Okay. Going back to the first page --
5 well, just -- we'll just move on. 03:31:33

6 Going to the tab that says "Direct
7 Revenue" Attribution "Summary," do you see that?

8 A. Yes.

9 Q. And it says, "Direct Revenue Attribution
10 via any developer app in the RFI list." 03:31:47

11 A. Yes.

12 Q. Do you have an understanding as to what
13 this page reflects?

14 A. I -- I don't have any knowledge of -- of
15 the content, apart from what I am reading in this 03:32:41
16 doc, but based on this document, it seems to be
17 attributing some revenue over a given time period
18 to each of five specific apps.

19 MS. WEAVER: Okay. Why don't we go to
20 tab -- just a second here -- the last tab, 2b? 03:33:01

21 MR. DAVIS: The second-to-last, right?

22 MS. WEAVER: Yes.

23 MR. DAVIS: Number of -- number of
24 advertisers impacted? Is that the right one?

25 MS. WEAVER: Yes. 03:33:36

1 Q. (By Ms. Weaver) And do you see where it 03:33:37
2 says "By Channel" and then "Global Sales"?
3 A. Yes.
4 Q. If I wanted -- well, what do you
5 understand "global sales" to reflect? 03:33:44
6 A. It would refer to one part of our sales
7 organization.
8 Q. And what is "SMB"?
9 A. It's -- my -- my understanding is that
10 this would refer to another part of our sales 03:34:02
11 organization.
12 Q. What -- what part of the sales
13 organization does SMB refer to?
14 A. It -- it -- it stands -- "SMB" stands for
15 "small- and medium-size businesses," so it's, 03:34:17
16 relative to global sales, smaller advertisers who
17 use our platform.
18 Q. And where does revenue data for global --
19 well, for global sales and SMB exist?
20 MR. DAVIS: Object to the form. 03:34:34
21 THE DEPONENT: Sorry. Your question was,
22 where does revenue data for global sales and SMB
23 exist?
24 MS. WEAVER: Yes.
25 THE DEPONENT: And are -- I guess, yeah, 03:34:53

Page 196

1 I'm hesitating because it probably exists in many 03:35:09
2 places, depending on the -- the context.

3 Is there -- do you have -- is there a way
4 you can clarify?

5 MS. WEAVER: Sure. 03:35:20

6 THE DEPONENT: So I can -- yeah.

7 Q. (By Ms. Weaver) If you were provided a
8 list of apps or advertisers or partners who had
9 access cut off and wanted to calculate the revenue
10 impact to Facebook of doing so, where would you 03:35:36
11 obtain the data that would allow you to perform
12 that calculation?

13 MR. DAVIS: Object to the form.

14 THE DEPONENT: I would reach out to the
15 BP&O team, I think, to help me access that data -- 03:36:07

16 MS. WEAVER: Okay.

17 THE DEPONENT: -- to perform the
18 calculations.

19 MS. WEAVER: Okay. I think we'll just
20 move on, but Facebook -- we're going to want a 03:36:17
21 corporate representative to testify about this
22 document.

23 Q. (By Ms. Weaver) And let me ask this,
24 Ms. Lee: Are you aware if any revenue impact
25 analysis was performed with regard to all of the 03:36:30

Page 197

1 apps, advertisers, and partners whose access was 03:36:35
2 cut off following the Cambridge Analytica scandal?
3 MR. DAVIS: Objection. Form and scope.
4 THE DEPONENT: Sorry. Was the question
5 whether -- am I aware of whether this analysis had 03:36:49
6 been done?
7 MS. WEAVER: Would you read back the
8 question, please, Rebecca. I'm sorry. I'm getting
9 tired.
10 (Discussion off the stenographic record.) 03:37:29
11 (Record read as follows:
12 "QUESTION: And let me ask this,
13 Ms. Lee: Are you aware if any
14 revenue impact analysis was performed
15 with regard to all of the apps, 03:37:29
16 advertisers, and partners whose was
17 access cut off following the
18 Cambridge Analytica scandal?")
19 MS. WEAVER: Thank you.
20 THE DEPONENT: I am not aware of any 03:37:30
21 analysis.
22 Q. (By Ms. Weaver) Did you do anything to
23 find out whether such an analysis was performed?
24 MR. DAVIS: Objection. Scope.
25 THE DEPONENT: No. 03:37:42

1 MS. WEAVER: Okay. You can set this 03:37:51
2 document aside.

3 Q. (By Ms. Weaver) Other than the -- can
4 you identify by name the third parties that
5 Facebook paid for their data? 03:38:05

6 MR. DAVIS: Objection. Form.

7 THE DEPONENT: Can -- can you clarify if
8 you're referring to specific instances where you --
9 you think that we paid for data?

10 Q. (By Ms. Weaver) You earlier testified 03:38:33
11 that Facebook bought data from third parties,
12 correct?

13 MR. DAVIS: Objection. Form.

14 THE DEPONENT: I believe I testified that
15 we had arrangements with data partners for two use 03:38:51
16 cases. One was partner categories, and one was for
17 the Lighthouse program.

18 Q. (By Ms. Weaver) So let's start with
19 that.

20 Can you identify all of the third parties 03:39:05
21 that Facebook paid for data?

22 MR. DAVIS: Objection. Form.

23 THE DEPONENT: So clarify that we paid
24 for the ability to use data in specific ways, which
25 I think is different than paying for data outright, 03:39:31

Page 199

1 and I'm not able to provide a full -- I don't -- I 03:39:34
2 don't know the full list of partners where -- where
3 we had arrangements like this.

4 Q. (By Ms. Weaver) Who would know?

5 A. People working on our data partnerships 03:39:51
6 team at the time would know.

7 Q. And who specifically by name?

8 A. Fred Leach is one person that comes to
9 mind.

10 Q. Anyone else? 03:40:01

11 A. He is the main person that -- that comes
12 to mind for me.

13 Q. Other than the two use cases that you
14 discussed, are you aware of Facebook paying any
15 other third parties for data? 03:40:16

16 MR. DAVIS: Object to the form.

17 THE DEPONENT: I -- I don't recall any
18 other -- other instances right now.

19 Q. (By Ms. Weaver) Did Facebook ever pay
20 users for their data? 03:40:53

21 MR. DAVIS: Object to the form.

22 THE DEPONENT: Not to my knowledge.

23 Q. (By Ms. Weaver) Are you familiar with
24 the Onavo program?

25 A. No. 03:41:16

1 Q. Were you prepared, in your deposition 03:41:18
2 testimony today, to discuss Onavo app?
3 MR. DAVIS: Object to the form. Scope.
4 THE DEPONENT: No.
5 Q. (By Ms. Weaver) Are you aware that 03:41:34
6 Facebook paid users ages 13 to 35 for their mobile
7 data through the Onavo app?
8 MR. DAVIS: Object- --
9 MS. WEAVER: Well, strike that. Let me
10 ask a better question. 03:41:44
11 Q. (By Ms. Weaver) Are you aware that
12 Facebook paid Onavo for data for -- of users ages
13 13 to 35 to follow their mobile data?
14 MR. DAVIS: Objection. Scope. Form.
15 THE DEPONENT: I'm not aware of this. 03:42:02
16 Q. (By Ms. Weaver) What is
17 "Facebook Viewpoints"?
18 A. I'm not familiar with the term.
19 Q. Do you know a market research app that
20 Facebook launched in 2019 called 03:42:14
21 Facebook Viewpoints?
22 MR. DAVIS: Objection. Scope.
23 THE DEPONENT: No, it doesn't sound
24 familiar.
25 Q. (By Ms. Weaver) Do you know if Facebook 03:42:25

Page 201

1 Viewpoints set a maximum payment to a user at \$599 03:42:25
2 a year?
3 MR. DAVIS: Objection. Scope.
4 THE DEPONENT: I'm not familiar with the
5 program or product. 03:42:37
6 Q. (By Ms. Weaver) Do you know whether
7 Facebook paid Onavo users up to \$20 a month for
8 their data?
9 MR. DAVIS: Objection. Scope.
10 THE DEPONENT: No. I'm actually not 03:42:52
11 familiar with Onavo.
12 Q. (By Ms. Weaver) You -- and you are not
13 familiar with Viewpoints either?
14 A. That's correct.
15 Q. And did you make any inquiry to find out 03:43:01
16 if there are any other programs for which Facebook
17 pays for user data which would set a market price
18 for it?
19 MR. DAVIS: Objection. Form and scope.
20 THE DEPONENT: I did not make any 03:43:12
21 inquiries along those lines.
22 MS. WEAVER: Okay. Let's take one more
23 quick break, like three minutes? five minutes?
24 THE VIDEOGRAPHER: Sure. We are off the
25 record. It's 3:43 p.m. 03:43:32

Page 202

1 (Recess taken.) 03:44:51

2 THE VIDEOGRAPHER: We are back on the

3 record. It's 3:59 p.m.

4 (Exhibit 375 was marked for

5 identification by the court reporter and is 03:59:29

6 attached hereto.)

7 MS. WEAVER: Ms. Lee, we have marked in

8 your absence what -- Exhibit 375, which is an Excel

9 spreadsheet labeled "Monetization Metrics."

10 THE DEPONENT: Okay. 03:59:46

11 MS. WEAVER: Let me when you have it up.

12 THE DEPONENT: I have it u.

13 Q. (By Ms. Weaver) Do you know what this

14 document is?

15 A. It looks like a report outlining some 04:00:10

16 trends in our revenue over time.

17 Q. I apologize. Would you repeat your

18 testimony, please?

19 A. I said that it seems to be a report that

20 outlines trends in -- in our revenue over time. 04:00:42

21 Q. Did you prepare this document?

22 A. No.

23 Q. Do you know who did?

24 A. No.

25 Q. Do you know its source? 04:00:59

1 MR. DAVIS: Objection to form. 04:01:01

2 MS. WEAVER: I'm sorry. I didn't hear

3 your testimony.

4 THE DEPONENT: I hadn't said anything.

5 I'm just looking at the rest of the page. 04:01:15

6 I do not know its source, but I assume

7 it's -- it came from our finance team.

8 Q. (By Ms. Weaver) And what does the word

9 "monetization" mean on the first page?

10 MR. DAVIS: Object to the form. 04:01:40

11 THE DEPONENT: My interpretation is these

12 are metrics that reflect how we monetize our

13 business.

14 Q. (By Ms. Weaver) And what do you mean by

15 "monetize"? 04:02:04

16 A. How we make money.

17 Q. And did you review this document in

18 preparation for your deposition?

19 A. Yes.

20 Q. And did you discuss it with anyone? 04:02:19

21 A. The --

22 MR. DAVIS: Ms. Lee, just -- I am not

23 sure I heard the end of the question, but I'll just

24 caution you not to disclose any

25 attorney-client-privileged communications. You can 04:02:34

Page 204

1 otherwise answer the question. 04:02:37

2 THE DEPONENT: To confirm, was the
3 question whether I discussed this document with
4 anyone?

5 MS. WEAVER: Yes. 04:02:45

6 THE DEPONENT: Yes, I did.

7 Q. (By Ms. Weaver) Anyone other than
8 counsel?

9 A. No.

10 Q. Okay. What do you understand the first 04:02:54
11 page to reflect overall?

12 MR. DAVIS: Object to the form.

13 THE DEPONENT: I don't seem to have page
14 breaks on the Excel. Are -- are you referring to
15 the first tab or first table or something else? 04:03:19

16 MS. WEAVER: Sure.

17 Q. (By Ms. Weaver) Looking at "Total
18 Reported Revenue," what did you understand that to
19 reflect?

20 A. I understand that this reflects our 04:03:44
21 revenue. It's a breakdown of our revenue as
22 reported in our public financial statements.

23 Q. Is there anything in this document that
24 is not publicly reported that you can see?

25 MR. DAVIS: Object to the form. 04:04:03

Page 205

1 THE DEPONENT: So I'm gradually scrolling 04:04:58
2 through the first tab, and I will call out some
3 things that I don't believe are publicly reported
4 on.

5 One is metrics broken down by surface. 04:05:07
6 Another is --

7 Q. (By Ms. Weaver) Ms. Lee, I'm sorry,
8 could you -- could you tell me where you are so we
9 can scroll down and get on the screen?

10 A. Sorry. I guess to answer your question, 04:05:20
11 yes, there are things in this document that are not
12 publicly reported.

13 Q. Please identify them.

14 A. So the first thing I had seen was
15 reported -- I think this is where it first came up, 04:05:37
16 reported impressions by interface, so around row
17 722, and then the same is true of impressions by
18 interface by region, around row 833, and any of
19 these impression breakdowns I don't believe are
20 publicly reported. 04:06:17

21 CPM breakdown by region, starting at 960
22 through 966, I don't believe we publicly report on
23 these or on CPM by interface at row 1010 or CPM by
24 interface by region.

25 And I'm not sure if we report on ad load 04:06:53

Page 206

1 by region, starting row 1153, and I don't believe 04:07:00
2 we report on ads revenue by user country, starting
3 row 1323, or by advertiser country, row 1421, or --
4 I think the breakdown of revenue per time spent,
5 starting on row 1519, is also more granular that we 04:07:47
6 would report publicly.

7 Shall I continue the --

8 Q. Yes. That's very helpful. Thank you.

9 A. I think I finished reviewing the first
10 tab. 04:08:07

11 Q. Great. Let's look at the second tab.

12 Going to row 355, what is "Daily FB Blue Time

13 Spent," and how is it calculated?

14 A. 355. Your question is, how is -- what is
15 "Daily FB Blue Time Spent," and how is it 04:08:25
16 calculated?

17 Q. Yes.

18 MR. DAVIS: Object to the form.

19 THE DEPONENT: "FB Blue" refers to the
20 Facebook app, and so daily FB blue time spent would 04:08:35
21 be time spent within the Facebook app.

22 Q. (By Ms. Weaver) And do you see the
23 asterisk that says that it excludes VOIP call time?

24 A. Yes.

25 Q. What does that refer to? 04:09:06

1 MR. DAVIS: Objection. Scope. 04:09:15

2 THE DEPONENT: I'm not sure what this
3 refers to specifically.

4 Q. (By Ms. Weaver) Okay. Let's look at the
5 third tab, Verticals. 04:09:24

6 A. Okay.

7 Q. In general, what does the data on this
8 tab relate to?

9 MR. DAVIS: Object to the form.

10 THE DEPONENT: This -- the data on this 04:10:00
11 tab relates to revenue as broken down by advertiser
12 vertical and the ad objective.

13 Q. (By Ms. Weaver) Okay. Are you aware
14 that this was one of the documents that your
15 counsel identified, at 9:30 last night, as one you 04:10:16
16 would be prepared to testify about?

17 MR. DAVIS: Objection. Form.

18 THE DEPONENT: I am not aware of any
19 specifics of discussions that happened last night.

20 MS. WEAVER: Thanks. 04:10:36

21 We have no further questions at this time
22 from this witness. We will hold the deposition
23 open and seek testimony on the topics on which she
24 was not prepared to testify.

25 MR. DAVIS: Okay. 04:10:49

1 MS. WEAVER: Thank you very much, 04:10:50
2 Ms. Lee.
3 MR. DAVIS: For the -- thank you.
4 We'll designate the transcript as
5 "Confidential Pursuant to the Protective Order" -- 04:10:55
6 oh, actually, let us take a brief break before we
7 close this out.
8 THE VIDEOGRAPHER: Okay. Off the record.
9 It's 4:11 p.m.
10 (Recess taken.) 04:11:07
11 THE VIDEOGRAPHER: We are back on the
12 record. It's 4:20 p.m.
13 MR. DAVIS: Sure.
14 Just -- just a very brief statement on
15 behalf of Meta. 04:21:03
16 So there was a request made at the
17 beginning of the deposition that the witness not
18 indicate -- following scope objections that
19 testimony was outside the scope that the witness
20 was prepared for are outside the scope of the 04:21:12
21 topic. We have endeavored to abide by that
22 instruction throughout the deposition.
23 We've registered our scope objections for
24 the record, but it is Meta's position that there
25 were substantial number of questions that were 04:21:24

1 outside the scope of Topic No. 10, which is a 04:21:26
2 relatively narrow topic. We have designated other
3 witnesses to testify on topics that were covered by
4 the questions today, including targeted
5 advertising, and we'll be producing a witness on 04:21:36
6 those topics.

7 Beyond that, no further comment, but we
8 will designate the transcript as "Confidential
9 Pursuant to the Protective Order."

10 SPECIAL MASTER GARRIE: Noted. 04:21:48

11 Off the record.

12 THE VIDEOGRAPHER: Okay. We are off the
13 record. It's 4:21 p.m.

14 (TIME NOTED: 4:21 p.m.)

15 04:21:58

16

17

18

19 ---o0o---

20 04:21:58

21

22

23

24

25 04:21:58

Page 210

1 I, AMY LEE, do hereby declare under penalty of
2 perjury that I have read the foregoing transcript;
3 that I have made any corrections as appear notes;
4 that my testimony as contained herein, as
5 corrected, is true and correct.

6 Executed this ____ day of _____,
7 2022, at _____, _____.

8
9
10
11
12 _____
13 AMY LEE
14
15
16
17
18
19
20
21
22
23
24
25

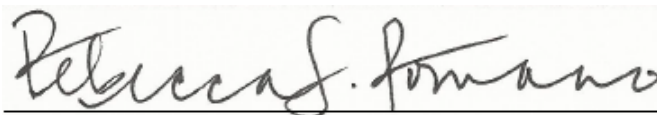
1 I, Rebecca L. Romano, a Registered
2 Professional Reporter, Certified Shorthand
3 Reporter, Certified Court Reporter, do hereby
4 certify:

5 That the foregoing proceedings were taken
6 before me remotely at the time and place herein set
7 forth; that any deponents in the foregoing
8 proceedings, prior to testifying, were administered
9 an oath; that a record of the proceedings was made
10 by me using machine shorthand which was thereafter
11 transcribed under my direction; that the foregoing
12 transcript is true record of the testimony given.

13 Further, that if the foregoing pertains to the
14 original transcript of a deposition in a Federal
15 Case, before completion of the proceedings, review
16 of the transcript [] was [X] was not requested.

17 I further certify I am neither financially
18 interested in the action nor a relative or employee
19 of any attorney or any party to this action.

20 IN WITNESS WHEREOF, I have this date
21 subscribed my name this 24th day of May, 2022.

22
23 

24 Rebecca L. Romano, RPR, CCR
25 CSR. No 12546

LESLEY E. WEAVER

lweaver@bfalaw.com

May 24, 2022

RE: FACEBOOK, INC., CONSUMER USER PROFILE LITIGATION

MAY 19, 2022, AMY LEE, JOB NO. 5238557

The above-referenced transcript has been
completed by Veritext Legal Solutions and
review of the transcript is being handled as follows:

___ Per CA State Code (CCP 2025.520 (a)-(e)) - Contact Veritext
to schedule a time to review the original transcript at
a Veritext office.

___ Per CA State Code (CCP 2025.520 (a)-(e)) - Locked .PDF
Transcript - The witness should review the transcript and
make any necessary corrections on the errata pages included
below, notating the page and line number of the corrections.
The witness should then sign and date the errata and penalty
of perjury pages and return the completed pages to all
appearing counsel within the period of time determined at
the deposition or provided by the Code of Civil Procedure.

___ Waiving the CA Code of Civil Procedure per Stipulation of
Counsel - Original transcript to be released for signature
as determined at the deposition.

___ Signature Waived - Reading & Signature was waived at the
time of the deposition.

Page 213

1 ___ Federal R&S Requested (FRCP 30(e)(1)(B)) - Locked .PDF
2 Transcript - The witness should review the transcript and
3 make any necessary corrections on the errata pages included
4 below, notating the page and line number of the corrections.
5 The witness should then sign and date the errata and penalty
6 of perjury pages and return the completed pages to all
7 appearing counsel within the period of time determined at
8 the deposition or provided by the Federal Rules.
9 xx Federal R&S Not Requested - Reading & Signature was not
10 requested before the completion of the deposition.

[& - 3000]

&	1	19th 13:5	2022 1:16 2:17
& 1:14 2:18 3:5 5:5 6:5 13:15,21 52:19 55:3,9,20 71:24 72:3,11 75:10 96:20 149:12 162:4 165:20 213:23 214:9	1 1:25 31:7 163:10 187:2 194:5 214:1 1,072 76:6 1.03 31:22 1.5 156:17 10 31:21,22 61:7 210:1 100 17:5 176:2,24 1010 206:23 103 9:8 109 9:12 10:43:46 160:8 10:46:04 162:3 10:47 68:25 10:58 69:3 1153 207:1 120 9:17 1201 4:10 12546 1:21 212:25 12:08 113:14 12th 3:11 130:16 13 179:25 181:18 182:3 201:6,13 130 9:22 1323 207:3 138 10:4 176:17 142 10:10 1421 207:3 149 10:16 15 8:5 61:7 1519 207:5 158 10:20 1600 3:12 17 8:11 32:10 34:13 137:22 18 1:6 2:6 9:5 1801 6:8 183 11:4,10 19 1:16 2:17 12:1 213:5	1:01 113:17 1:54 148:20 1st 87:24	12:1 13:5 211:7 212:21 213:3,5 2025.520 213:9,12
0		2	
0.33. 31:24 00002851 9:6 0002851 55:1 00165410 9:14 00165493 9:15 01191149 10:13 146:1 01191153 10:14 01191351 10:22 01191381 10:23 01835372 9:19 120:20 01835379 9:20 01994696 9:24 130:14 01994698 9:25 02148187 10:8 138:2 02843 1:6 2:6 02936308 11:16 02950555 9:9 02950559 9:10 03055702 11:7 183:22 03055706 11:8 03252528 8:16 06 183:22		2 31:7 85:21 163:16 191:23 192:1 194:6 2.8 152:9,20 2/9 85:3 20 18:9 37:12 202:7 20-0466 1:22 2001 6:16 2007 22:3,14 44:10 50:1,23 2008 44:10 2009 43:20,24 44:2 201 37:12 2012 18:4 22:4,14 23:18 50:8,19,24 53:8,12 72:20,23 112:18,24 113:9 130:16 2013 55:15 2015-2021 8:19 2017 18:4,8 50:8 50:14,16 78:11,22 79:4 192:1,1 2017-01-01 191:11 2018 9:4,5 31:18 32:7 34:8 72:21 73:3 77:12 85:24 121:1,10 147:3,10 147:16 157:12 158:22 183:23 192:2 2018-06-20 191:11 2019 201:20 202 46:20	203 11:14 206 4:13 20th 192:2 2100 6:17 213 7:10 214 1:25 6:19 220 29:23 24 142:21 183:22 213:3 24th 212:21 25 158:11,16,17 250 156:16 253-9706 7:10 26 158:15 27th 158:22 160:8 28 111:14 112:5,6 179:25 181:18,24 182:4 2843 1:4 2:4 28d 111:12,14 298-5735 6:11 2:02 148:23 2:55 183:5 2b 195:20 2e 193:4 2pp 85:17,20
			3
			3 31:23 47:1 179:13 3/16 85:4 3/27/2018 10:10 10:20 30 1:12 8:14 16:3 37:19,19,23 214:1 300 139:20 140:20 3000 5:17

[303 - ac]

303 6:11 3161 5:8 3200 4:11 32nd 7:8 3491 1:23 35 201:6,13 355 207:12,14 359 165:18 360 8:11 17:4,6,7 50:12 51:6,9 361 8:14 29:24 30:1,13,19,21 167:10 178:3 362 8:18 37:12,13 43:1 47:2 363 8:21 46:21,22 47:2 69:5,23 173:17 364 9:4 54:16,17 70:4 365 9:8 103:4,5 113:22 116:17 366 9:12 108:23,24 109:4 367 9:17 120:14,18 368 9:22 130:8,9 130:18 173:23,23 369 10:4 137:23 138:1,8 173:23 178:12 37 8:18 370 10:10 142:22 145:24 146:11,14 149:3 371 10:16 148:24 149:2 372 10:20 158:12 158:18,19 159:1 373 11:4 121:19 183:9,16,17,18,21 184:4 194:20	374 11:10 183:12 183:16,17 193:19 375 11:14 203:4,8 379 120:21 393-8247 5:19 3:12 183:8 3:43 202:25 3:59 203:3 3rd 135:14 165:19 4 4 164:3 4/1 85:3 4/11 85:3 415 3:14 5:19 4200 6:9 445-4003 3:14 451-3993 5:10 459 109:13,19 110:3 46 8:21 460 111:11 469 179:12 47 139:20 140:20 473 112:4 4:11 209:9 4:20 209:12 4:21 210:13,14 5 5 134:2 50 82:24 83:4 99:15 500 152:6,19 5238557 1:24 213:5 53 146:2 54 9:4 555 3:11 5:16 7:7 556 103:13 116:18 58 159:19	59 159:19 599 202:1 5th 7:7 6 6 1:12 16:3 151:21 152:1 6/24/2018 11:4 623-1900 4:13 63 55:1 64 112:4 65 86:12 673 54:15 698 130:14 698-3204 6:19 7 7 116:19,20 704 194:20 722 206:17 73 191:11 7321 212:23 75201 6:18 7th 192:1 8 8 179:12 80 89:4 80202-2642 6:10 827 1:22 833 206:18 856 69:19,25 70:11 857 71:18 72:16 74:17 861 85:10 864 86:17 865 86:12,16 87:23 868 88:17,18 869 88:12 880 89:1 881 55:2 8th 138:4	9
			9/8/2014 10:4 90 82:22 83:3 90013 7:9 92612-4412 5:9 94105-0921 5:18 94607 3:13 949 5:10 960 206:21 966 206:22 98101 4:12 9:22 2:17 12:2 13:5 9:30 208:15 9th 9:12
			a
			a.m. 2:17 12:2 13:5 68:25 69:3 ab 87:16 88:20 abbreviated 51:22 abide 209:21 ability 15:23 83:12 98:7 100:2 134:22 199:24 able 28:13 29:1 34:25 36:20 58:11 58:13,24 93:10 94:2 98:12,16 103:1 108:1 113:9 115:3,25 116:6 121:17 129:22 139:3 155:6 157:18 167:2,6 170:22 171:7 172:8 200:1 absence 203:8 absolutely 12:8 abstract 172:1 ac 39:22

CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

[accelerated - advertisers]

accelerated 148:7	170:22 171:13,17	addition 40:13,20	129:17,19,21,23
access 61:19 64:23	172:4 191:21,24	additional 64:23	134:6,12,21,22
64:24 98:9 103:21	192:2 194:7	64:24 128:15	142:16 145:11,12
114:4 116:24	active 37:10,17	additives 127:19	145:14 147:23
131:19,19 132:7	38:9,14 39:2,3,6,6	address 114:8	148:5 152:23
143:10 190:8	39:14,14,15,16,19	116:25 151:20	153:4,24 154:4
191:4 192:3,10	39:22,23,24 40:11	161:16 176:21	155:1,3,3,5 159:8
197:9,15 198:1,17	40:13,14 42:1	addressing 10:16	167:20,21 168:5,6
accessing 98:11	46:5 49:7 110:18	80:18 148:11	170:20,22,24
192:5	147:25	adhere 36:19	171:9,12,19,20
account 35:18	actively 36:14	adjust 105:5,11	172:5 173:15
36:12,13,17,19	activity 41:15 90:8	administered 15:2	181:9,10 189:16
45:12,15 119:24	97:11 100:17	212:8	207:2
accounted 120:8	116:21	ads 23:21,22 24:16	advertise 182:1
155:21	actual 34:18 46:14	25:9,13,15,16,19	advertiser 26:2
accounting 58:1,2	83:19,24 84:15	26:2,3 27:14	71:7,8 75:5,6 82:5
58:11 59:12,15,16	156:25 158:1	28:16,18 41:21,21	96:6,8 97:6 99:8
91:12	acxiom 143:15	42:7 49:15,16,19	99:18 100:2,18,19
accruing 19:15	163:11,11 164:6	49:22 50:20,21	107:18 108:6,14
accuracy 43:7,14	167:1 168:3 174:7	51:1,2,5,8,13,25	114:5 119:16
47:11	ad 21:6 25:3 26:2	54:12 56:7 60:20	164:25 165:13
accurate 43:13	26:4,6,10 41:25	63:21,23 72:19,19	172:3 179:21
119:8	49:6 63:21 77:7	73:20 76:11,17,23	181:8 207:3
accurately 47:9	80:13 86:24 87:1	77:2,5,9,13,16,23	208:11
achieve 166:7	88:13,20 100:5,20	78:2,5 79:9 80:16	advertiser's 83:10
achieved 117:12	100:21 103:21	81:25 82:2,3,7,9	93:25 119:11
achievement	104:16 107:19,22	82:12 83:10 85:11	advertisers 25:18
187:9 189:17,18	107:24,25 108:2,8	87:10 89:3,10	25:21 41:22 53:3
achievements 57:6	108:14 116:3,7	90:3,5,13 95:2,9	71:21 72:10,11,15
acquired 54:9	118:10 128:9	95:13,23 96:11,20	72:24 78:7,12,15
137:14	130:3 133:25	97:11,12 98:17,19	78:23 79:1,2
acronym 31:14	135:3,5,22 154:4	98:21 100:24	81:23 83:4,25
act 36:14,23	171:6 172:9 173:4	101:3,14,21 102:8	90:4,21 93:16
124:15	173:15 176:14	103:16 106:15,16	94:25 95:4,8,12
action 26:24 172:9	206:25 208:12	106:23,25 107:7	98:1,2,20,23 101:2
191:24 212:18,19	ad's 71:1	107:11,12,14	101:2,22 113:25
actionable 27:9	adavis 3:17	108:18,19 110:1	114:3 121:1
actions 1:8 2:9	added 50:17	114:2 115:20	123:23 128:4,7,10
41:17 79:12 80:15	127:19	116:1,17 118:11	129:16,19 138:15
108:19 134:7,23	adding 48:2,16	118:18,25 122:19	138:20 139:3
167:10 168:25	154:18	124:17 128:11,15	143:10 147:19,21

[advertisers - app]

150:23 157:14,15 157:20,22 171:5 173:3,3 177:2,15 177:17 179:3,4,9 179:23 180:25 181:3,7,14,17 182:2 186:21 187:25 189:23 190:7,19,21,25 191:5,23 192:4 193:5,10 194:8 195:24 196:16 197:8 198:1,16 advertising 24:3,5 24:7 51:11,24 52:8,9,13,18 53:6 53:6 54:13 62:25 64:11,13 70:19,20 71:4 77:21 94:23 104:16 115:25 116:23 128:14 129:13 134:16,18 134:21 143:12,12 210:5 affinity 65:6,9 afternoon 113:18 age 95:24 agencies 54:12 128:14 agency 51:12 54:10,11 agenda 149:11 ages 201:6,12 aggregate 169:18 aggregated 93:7 165:4,8 aggregator 164:5 164:18,22 ago 30:24 55:15 112:6 156:24	agree 35:19 44:9 51:24,25 126:9 128:11 132:3 168:25 agreed 35:15,25 35:25 36:6 43:12 128:16 agreeing 25:4 agreement 127:7 127:22 130:1 agreements 28:21 29:10 127:20 128:18,21 129:5,7 132:19 133:1,4 ahead 50:5 60:4 90:19 alameda 1:15 2:16 12:1 align 23:9 134:24 aligned 62:24 63:8 alliance 167:7 allison 138:4,10,13 142:9 allow 90:21 97:19 108:10 116:20 118:11,18 123:24 155:16 197:11 allowed 58:4,5,8 90:4,13,21,21 118:25 123:16 allows 103:19 119:10 193:5 als 96:5 alter 140:17 altogether 144:5 america 88:3,9 182:13,19 amount 42:14 48:18 58:23 83:20 84:15 130:3 135:5 153:4 180:24	amounts 42:23 amy 1:13 2:14 8:3 13:6 15:1 211:1 211:13 213:5 analysis 131:25 140:23 141:6,16 142:6 155:13 157:17 158:3,5,7,8 173:24 174:10 192:16 194:22 197:25 198:5,14 198:21,23 analytica 82:19 83:21 84:1 147:7 147:10,12 148:2 186:14,21 188:1 189:24 190:6,20 191:4 198:2,18 analytics 75:7 101:9 123:9 124:2 124:8,8 188:15 analyze 152:25 angeles 7:9 anil 138:14 141:24 142:2 anne 3:6,9 13:17 announced 116:20 announcement 82:6 annual 46:1 178:24 179:2,3,8 179:19,20,22 180:20 181:3,12 181:14,16 annualized 152:5 answer 50:1 63:12 84:4 86:7 170:4,5 185:25 205:1 206:10 answered 22:21 155:4	answering 156:2 answers 50:3 anybody 34:7 60:14,23 74:12 112:25 113:2 185:13,20 186:7 192:23 apart 33:11 192:13 195:15 api 61:21 62:1,12 63:8 64:7,13,18,21 65:16 66:6,22 73:20,20 81:19 85:24 139:4,16 191:21,24,24 193:6 194:6 apis 61:14,16,19 66:20 67:5 80:22 81:3 apollo 114:2,12 apologies 46:12 apologize 70:6 86:18 185:18 203:17 app 26:16,19,25 27:19 28:17 63:22 64:6 65:5 68:4 90:23,24 92:10 93:19,21 98:19,21 98:22,24 99:1 100:18,21,23,25 101:1,21 104:11 104:24,24 106:14 106:15 107:1 108:14 111:18 112:1 115:24 116:2,3,8,9 193:5 194:6 195:10 201:2,7,19 207:20 207:21
---	--	---	--

[apparently - avenue]

apparently 163:5 appear 87:10 211:3 appearances 3:1 4:1 5:1 6:1 7:1 appeared 35:23 79:5,5 appearing 3:2 4:2 5:2 6:2 7:2 13:22 213:18 214:7 appears 32:25 109:9 117:17 apple 106:1 116:20 apple's 116:23 application 194:5 applications 116:21 194:7 applied 139:25 apply 15:14 63:13 100:4 140:14 168:5 appreciate 12:14 approach 192:8 appropriate 44:11 apps 11:6 27:7,14 27:16,18 31:21 65:7 98:20 100:17 100:18 101:23,24 102:14,14,24,24 107:2 110:6 111:12 116:24 117:21 129:17 183:24 184:22 186:13,20 187:3,4 187:25 189:22 190:7,18,21,25 191:5,24 192:3 194:12,15,21,24 194:24 195:18 197:8 198:1,15	appsflyer 105:5,9 april 9:5 85:16 130:16 area 58:17 66:16 129:11 141:11,22 152:24 171:20 arising 190:6 arm 42:20 arpd 31:7,10,18 32:6,8,13 arpu 8:22 45:12 45:17,20,25 47:15 48:1,11,15,16,17 49:1,17,20,25 arrange 126:17 arrangements 199:15 200:3 arrive 93:12,14 arrived 19:10 152:15 156:10 articles 87:17 88:22 aschwing 5:21 asia 47:24 aside 199:2 asked 84:14 131:17 asking 19:4 35:20 43:6 48:10 54:1 59:24 63:2 91:23 97:2,17 102:7,9 103:11 104:20 128:20 140:6 179:12 aspect 152:14 aspects 28:1 99:2 assess 11:12 194:4 assessment 33:3 56:5 131:7 132:4 157:9	associate 7:17 108:1 associated 82:11 106:1 108:9 121:24 125:18,24 137:1 189:22 190:21 193:6 assume 15:13 33:1 44:7 47:8 55:20 80:18 113:8 122:14 157:5 158:4 174:19 181:25 204:6 assuming 84:12 assumption 141:3 assumptions 44:14 153:3,11 192:15 asterisk 207:23 asterisks 81:22 85:1 at&t 31:18 32:7 attached 16:20 17:9 30:3 37:15 46:24 54:19 103:7 109:1 120:16 130:11 137:25 142:24 146:9 148:25 149:3 158:14 183:11,14 183:17 193:4 203:6 attachment 16:24 147:2 185:10,11 attachments 159:16 attainment 75:25 attempt 192:24 attempted 67:3 attendance 13:19 attention 112:5 113:23	attest 36:15 43:6 attorney 5:7 6:7 6:15 13:13 185:24 204:25 212:19 attorneys 3:10 4:9 5:15 attractive 129:24 attributable 181:17 attribute 132:15 170:22 171:7 attributed 117:13 attributing 195:17 attribution 117:2 117:5,10,18 172:16 174:22 175:14 187:3 189:9 194:5 195:7 195:9 audience 10:5 51:12 87:20 95:1 95:12 96:5,10,21 108:3 118:5 119:20 129:14 139:6 163:7,10 audiences 94:19 94:21 118:9 119:7 119:9,10 122:16 122:19 138:16,21 139:4,17 140:18 141:14,20 142:15 142:17,18 163:8 168:24 auditors 55:5 auld 3:5 13:15 austin 5:14 13:23 available 94:13 153:24 191:25 avenue 4:10 6:16 31:11 63:22 135:19 179:3
--	--	--	---

[avenues - bonnie's]

avenues 64:1	194:19 195:4	bearing 138:2	bfalaw.com 3:15
average 29:14,20	198:7 203:2	bears 55:1 120:20	3:16,17 213:2
30:7,10 31:11,14	209:11	120:21 130:13,14	big 135:5
34:13,18 35:3,21	backing 126:15	183:21	bill 93:10 128:8
36:3 37:5,9 38:18	backs 46:16	beau 86:6	billable 91:11 93:4
42:14 46:1,5,8	bacon 65:11	beginning 13:12	billed 26:5,6,8
48:8,22,23 49:6	bad 127:13,24	209:17	billing 25:23,24
82:23,24 83:7,10	bar 76:9 77:1	begins 113:24	26:21,23,25 27:1
83:13,14 112:6	barnes 158:21	behalf 2:14 13:16	41:21 42:9 82:8
averaging 42:1	159:10 160:7	13:21,22 14:2	90:13,20 92:14
avril 86:6,6	161:20 163:1	16:7 103:19	94:1
aware 26:18 27:5	164:3	209:15	billion 134:2 152:9
27:24 28:3,8	bars 77:1	behavior 78:5	152:20 156:17
55:16 104:1,12	barter 114:21	behavioral 95:25	179:13,25 181:18
111:23 115:14,17	based 25:15,16	134:1,3,6,16,18,21	182:3
115:19 116:14	32:24 33:1 36:21	135:11,19	bit 23:17 63:11
118:17,24 119:5	37:8 43:5 79:2	behaviors 123:8	89:15 96:17
119:22 120:6,12	80:23 83:14 90:3	123:17	115:24 118:5
128:13 129:10	97:20 98:14 99:7	beijing 76:6	135:24 140:6
186:11,19,24	100:12,13 114:23	believe 17:12	161:19 162:2
191:3,7 197:24	117:16 119:6,11	19:25 28:5 34:6	172:1 177:23
198:5,13,20	125:21 130:2	35:19 41:20 42:5	190:12
200:14 201:5,11	134:7,22 139:14	48:21 67:2 69:8	bleichmar 3:5
201:15 208:13,18	142:14 143:5	72:2,7 73:3 86:5	13:15
awareness 186:17	145:13 153:11	94:1 106:9 121:7	block 89:10
b	154:4,22 156:21	134:15 136:12	blue 207:12,15,19
b 1:12 5:6 7:5 8:8	167:2 168:3	142:3,8 143:23	207:20
9:1 10:1 11:1 16:3	170:16 173:12	154:17 159:6,11	bluekai 132:10
79:24 86:8 122:24	185:3 195:16	175:25 176:11	133:2,8,10
214:1	bases 20:15	199:14 206:3,19	bluekai's 133:15
back 14:3 22:16	basis 37:21 38:12	206:22 207:1	blume 6:6
22:17 56:19 63:1	56:13,23 93:20	benefit 129:18,21	board 146:22
69:2 74:16 96:23	133:12	best 15:23 49:1,4	board's 10:12
99:13 101:2 108:9	bate 146:1	64:11 71:15	146:18
111:3 113:9,16	bates 55:1 69:14	beta 65:24 66:2	boarded 121:24
116:17,17 121:4	69:19 88:12	better 44:11 62:10	122:5,11
124:19 125:6,7	120:20 130:13	62:19,21 63:5,6	bod 147:3
148:10,22 159:15	138:2 146:1	71:12 113:1 175:5	bonnie 57:17 59:2
160:2 170:23	159:19 173:22	176:3 201:10	60:22 114:24
171:9,18 178:11	183:21	beyond 32:20	bonnie's 59:5
183:7 188:20		155:22 210:7	

[book - case]

book 58:5,8,11,13	brought 100:7	bytedance's 77:12	152:13 197:18
booked 83:24 84:3	124:23	78:2,5,6,11,22	calibrate 168:24
114:23 115:4,6,11	bruce 164:17,21	79:8	california 1:2,15
115:15	bruce's 164:4	c	1:21 2:2,16 3:13
books 58:24	bt 135:5,7,10	c 6:6 11:5 183:24	5:9,18 6:8 7:9
bottom 81:21 88:6	building 97:14	ca 8:16 9:9,10,14	12:1
121:19 132:9	135:22 157:21	9:15,19,20,24,25	call 10:12 101:9,11
139:19 162:25	built 73:19 119:14	10:8,13,14,22,23	129:14 146:18
172:5	bullet 116:19	11:7,8,16 85:3,3	206:2 207:23
bought 199:11	135:21 191:22	120:20 130:14	called 27:3,9 44:20
bp&o 75:6,9,13,21	business 16:14	138:2 146:1	75:6 133:2 201:20
188:15 189:14	42:6,11 51:23	183:22 213:9,12	cambridge 82:19
197:15	56:7 62:7,8,12,24	213:20	83:21 84:1 147:7
break 42:8 54:21	63:21,23 66:16	ca's 163:6	147:10,12 148:2
68:16,18,21 88:14	70:19 71:1,7	calc 30:6	186:14,21 188:1
88:21 91:16 99:21	73:19 75:10 79:17	calculate 29:9,19	189:24 190:6,20
113:12 149:1	79:20 80:23,24	30:7 37:5 38:18	191:4 198:2,18
182:22,24 183:15	89:12 92:23 102:1	49:16,25 83:12	campen 4:7
202:23 209:6	102:2,16,17,20,23	102:3,18,23 103:1	canada 47:24 48:1
breakdown 19:17	104:11 105:1	108:11 112:23	48:2,13,16,17
32:25 42:7 155:7	111:18 129:11	190:5,17 197:9	canvas 110:5,6,8
205:21 206:21	130:24 132:13	calculated 29:13	110:18
207:4	133:8,15 143:24	34:16,17 36:4	capabilities
breakdowns	166:6 171:6,7	42:14 45:25 48:12	118:10 124:6
206:19	204:13	81:25 84:7 111:20	129:20
breaks 18:3	businesses 25:16	112:15 139:22	capture 135:4
205:14	51:4 53:5 73:18	140:7 152:17	captured 51:17
brief 209:6,14	101:24 102:14,24	154:17 156:5	captures 132:11
bringing 126:5	102:25 103:2	192:25 207:13,16	card 51:13
broader 59:17	105:2 143:23	calculating 34:22	care 172:4
90:14 189:5	196:15	45:11 47:25 48:15	cari 4:7
broadly 66:1	buy 143:22 165:23	48:16 154:9 192:9	carrier 29:4 33:1
broke 147:7	166:12,20	calculation 16:8	carriers 27:25
broken 88:7 206:5	buying 26:2,3	35:4,21 46:16	28:2,7,25 33:6
208:11	128:11,15 166:21	48:2,6 50:7 57:14	34:21 98:6,6,9
broker 133:15,19	buys 133:16,19	106:6 112:20	case 1:5 2:5 15:11
133:23 173:25	168:23	113:3 151:25	47:3 100:11,15
174:11 175:9	bytedance 76:6,10	179:21 190:10	129:12 152:9
brokers 115:12,12	76:18 77:20,22	197:12	154:10 170:21
115:16 143:17,22	79:5,13 80:5,19	calculations 46:14	193:21 212:15
169:1 170:1,13		49:20 66:18	

[cases - comment]

cases 105:3 123:25 128:13 129:10 149:24 150:2,4,7 191:8 199:16 200:13 catalina 151:6 174:7 catch 105:8 categories 19:10 51:16 71:3 90:17 90:23 107:5 143:1 143:3 144:2,5,7,16 144:21,24 145:7 145:10,15,18 147:16 148:7 149:12 152:3 153:5,9,20,23 154:4 157:1,5,8,11 157:15,16,19 160:18 163:22 165:20 167:2,5,8 167:11,19 168:1 174:5,20 175:24 176:13,15 199:16 category 70:18,19 73:12 82:23 176:9 176:17 cause 12:7 caution 185:23 204:24 ccp 213:9,12 ccr 1:20,22,23 212:24 cdavis 5:11 cellular 114:6 certain 43:22 52:1 66:14 75:11 90:6 99:8 100:25 105:21 146:24 149:9 150:13 153:4 176:24	187:7 189:14 190:3,8 191:4,5 certainly 75:11 certified 2:19,20 212:2,3 certify 212:4,17 cetera 15:18 36:1 100:6 118:14 164:18 chance 138:6 158:24 change 10:5 138:15 140:17,19 141:9,10 142:12 154:25 157:13 changed 49:17 changes 149:8,16 149:20 151:23 152:22 156:15 157:2,6 158:2 159:22 161:18 165:19 175:17 182:20 channel 22:19 23:4 196:2 channels 19:15 20:16,20 22:22 23:8 104:16 characteristics 99:8,17 characterization 119:8 132:6 charge 25:18,20 33:14 73:25 82:4 charged 41:23 charging 61:18 charlotte 158:20 159:4 162:3 164:5 164:24 charlotte's 159:12	chart 8:21 22:23 76:9 77:1,18 81:23 84:17,20 110:8,13 chat 159:2 160:2,3 170:18 chen 7:17 13:24 183:23 184:10,11 188:8 chief 60:5 choice 63:9 chris 130:23 churn 44:20,22 45:2,10,12 circulated 56:13 civil 213:19,20 clarify 30:9 45:14 73:8 77:15 78:15 96:16 99:22 144:18 154:12 163:3 190:24 197:4 199:7,23 class 97:22 105:17 120:8 claufenberg 4:15 clause 125:8 clean 179:17 clear 47:25 84:19 84:22 clearly 21:18 click 26:23 41:8,25 88:2,7 90:24 clicked 38:7 clicks 9:13 26:10 26:10 40:16,20 41:17 89:15,24 90:3,8,17,22 92:10 96:22 97:4,11 117:12 126:19 150:13	client 70:19,20 163:17 185:24 204:25 clients 52:9 193:10 close 138:14 209:7 closely 60:7 78:4 closer 73:21 148:4 code 213:9,12,19 213:20 coefficient 65:8 colin 5:6 13:21 144:12 185:18 193:21 colleagues 13:23 collected 117:21 125:19,20 colloquy 179:16 color 76:16 colorado 6:10 column 23:2,5 31:20,21,23 83:3,5 87:4,14 173:12 177:2,5,11,13,15 178:24 179:20 180:24 181:6,13 181:14 columns 179:6 180:6,11 combined 48:14 come 51:1 61:23 62:6 63:1 65:18 97:24 105:12 143:15 169:23 comes 21:4 75:4 77:9 108:6 129:12 171:21 200:8,11 coming 50:20,21 80:17 153:19 commencing 2:16 comment 41:8 210:7
--	---	---	--

CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

[common - correct]

common 70:25	137:20	consideration 65:7	207:7
commonly 160:25	concepts 55:25	81:2 164:4	continued 53:10
comms 63:15	56:2 172:2	considerations	53:10 77:12
communicating	concerns 81:2,18	58:19,20	150:24
164:11,14	concluded 63:5	considered 65:15	continuing 64:9
communications	66:15	65:18	147:22
185:24 204:25	conclusion 140:24	considering 61:13	contra 51:13
comp 153:19	157:17	61:15 141:9	contract 24:8 25:6
companies 105:8	conclusions 63:3	consist 50:22	51:23 117:11
143:9,13,14,22	conduct 36:1 38:6	consistent 71:14	121:6,9,13 123:5
144:1,15,20,23	conducted 15:20	136:17	124:22 126:17
145:6,17 153:20	confidence 136:16	consolidated 8:11	128:7
166:25 168:8,12	confidential 1:10	22:13	contracts 41:16
168:14	209:5 210:8	consume 132:14	127:7,9,12,15
company 74:15	configure 94:2	consumer 1:5 2:5	control 135:15
96:20 136:13	confirm 22:6	13:7 121:23,23	controls 118:14
137:9,13 140:20	28:13 30:16 35:1	122:4,4,24 123:1,7	conversation
159:13	121:17 205:2	123:9,17 124:10	58:22 59:1 97:10
compared 189:18	confused 177:18	124:21,22 125:17	148:1
comparison 84:21	177:23 180:5	125:22,24,25	conversations
complete 145:9	194:19	126:4 213:4	114:24 147:17
completed 213:7	confusion 70:3,6	consumers 124:16	conversion 24:23
213:17 214:6	163:2	cont'd 6:1 7:1 9:1	25:5
completion 212:15	conjecture 192:17	10:1 11:1	conversions 24:6
214:10	192:20	contact 213:9	24:13,18 25:9
complex 58:22	connect 115:25	contained 211:4	convert 96:9
93:11	173:3	content 32:20,23	cookies 125:22
complies 14:8	connected 29:3	41:1,8,12 90:15	cooking 96:3
component 111:25	136:15	107:5,10 195:15	copied 188:6
components 49:24	connection 28:20	contents 56:2	copy 146:6 173:20
111:21	29:9 55:21 172:8	context 25:1,3	173:21
comprehensive	191:23	35:11,11 41:13	copying 131:16
65:19	connections 65:5	44:23 57:1 58:18	core 62:24
compromising	101:3 116:7 193:6	73:9,16,24 74:5	corner 69:16 85:1
50:9	consecutively	101:21,23 102:13	corporate 1:13
comscore 151:7	160:3,4	104:5 112:16	16:1 197:21
con 24:13	consent 139:5	115:23 134:12	correct 15:11,20
concentrated	consequences 80:6	166:4,10 169:13	16:4 38:15 42:17
153:15 154:6	consider 63:13	192:13 197:2	49:9 53:20 65:23
concept 101:19,20	81:6,13 152:22	continue 68:19	71:25 76:7 84:9
115:19 117:8		147:18 182:23	84:11,17 89:25

CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

[correct - date]

106:3 113:20 140:8 156:17 157:24,25 193:2 199:12 202:14 211:5 corrected 211:5 corrections 211:3 213:14,15 214:3,4 correctly 47:23 cost 26:24 86:20 86:21 114:6 costs 82:11 counsel 3:1 4:1 5:1 6:1 7:1,17 12:17 12:25 13:12,18 16:20 43:4,11 47:3 205:8 208:15 213:18,21 214:7 count 110:9,24 111:2 counted 39:12,13 93:6 counting 36:5 39:24 countries 48:4,7,8 153:15,21,25 154:2,5,19 country 47:16 155:6 207:2,3 couple 109:11 122:21 129:10 193:14 course 39:16 105:17,25 court 1:1 2:1,20 12:10 14:2,3,5,9 17:8 30:2 37:14 46:23 54:18 57:20 103:6 108:25 120:15 130:10 137:24 142:23	148:25 158:13 183:10,13 203:5 212:3 cover 194:3 covered 210:3 cpa 26:23 27:1 cpm 86:19 206:21 206:23,23 cpms 86:13 87:3 crawford 141:24 141:25 create 18:7 20:7 20:11 22:3,22 36:16 53:17 98:12 122:19 138:15,21 139:4,17 created 21:11,14 43:4 47:2,8 123:16 140:18 142:16 creating 61:25 creation 10:6 75:22 119:10 credit 51:13 criteria 100:4,4 crutcher 5:5 6:5 13:21 csr 1:20,21,22 212:25 ctr 87:23 88:1 current 78:5 96:7 110:24 currently 163:5 custom 10:5 94:19 94:21 96:5 118:5 118:9 119:7,9,9,19 119:20 122:15 138:15,21 139:4 139:17 140:17 141:14,20 142:15 142:17,18 163:7,8	163:10 customer 101:25 102:2,15,17 115:18 119:12,13 119:18 122:18 customers 96:8,9 102:19 cut 131:18 191:5 197:9 198:2,17 d d 8:1 daily 38:9,14 39:1 39:6,14,15,22,23 40:10,13 82:23,24 83:8,10,13,15 84:2 110:17,17,19 207:12,15,20 dallas 6:18 dan 130:16 131:17 daniel 7:5 12:6 daniels 130:23 131:15 135:2 data 9:24 10:17,17 16:10,11,13,15 20:15 21:3 22:16 27:9 44:14 84:12 92:18 93:2,5 97:13 103:17 105:15 107:11 108:9 111:8 113:8 113:24 114:6,21 115:6,11,11,12,12 115:15,16 117:21 117:24 119:18,18 120:9 121:23,24 122:4,4,11,24,25 123:1,6,17 124:2 124:21,22 125:17 125:18,24 126:4 126:11,22 131:11 131:19 132:7,11	132:14,14 133:10 133:13,16,19,23 133:25 135:14,14 136:15 141:10,14 141:21 143:5,5,7 143:17,20,22,23 147:2 148:5,11,11 149:9,25 150:12 150:16,25 152:23 160:9,22 161:4,8 161:12 162:9 163:1,10,18 164:25 165:13,19 165:23 166:12,13 166:20,22,24 167:3,7,11,18,20 168:3,5,18,23 169:1 170:1,13,20 172:15 173:8,9,15 173:24 174:10 175:9,17 176:7 178:3 187:3,6,8 188:21,23 189:10 189:11,19,25 190:8,10,22 191:4 191:21,25,25 192:10 194:6 196:18,22 197:11 197:15 199:5,9,11 199:15,21,24,25 200:5,15,20 201:7 201:12,13 202:8 202:17 208:7,10 databases 20:20 20:22,25 21:25 53:22 93:7,9 datalogics 143:16 date 84:22 130:15 212:20 213:16 214:5
---	---	---	--

CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

[dated - depends]

dated 138:4 158:21 dau 8:18 38:17,21 43:6,20,24 44:2,10 110:8,9 david 4:6 13:19 60:6,15 davis 3:6,9 5:6 13:17,20,21 16:22 17:15,21 18:10,15 18:21,25 19:8 20:3,17,23 21:15 22:5,24 23:7 24:1 24:10,24 25:7 26:14,20 27:11,21 28:4,12,23 29:11 29:17,21 30:8,12 31:2,12 32:4 33:8 33:15,20,25 34:9 34:24 35:17 36:8 37:2 38:19 39:4 39:20 40:5,17,23 41:19 42:2,18 43:10,21 44:4,12 45:13 47:7,17 48:5,20 49:3,10 50:4 52:16 53:21 54:20 55:6,18 56:15,24 59:19 60:3,12 62:2,5,15 63:10 64:8,15,19 65:3,13 66:3,13,21 67:8,12,17,23 68:8 68:20 70:2,23 71:5 72:6,17 73:1 73:7,13 74:3,8,13 74:21 76:24 77:6 77:14 78:3,8,13,24 79:10,16,21 80:7 80:11 81:4 82:13 83:1,16,22 84:5,18	85:25 86:15 87:8 88:5,15,18 90:1 91:7,21 92:12 93:1,23 94:7,14 95:7,14,20 96:15 97:1,23 99:10,20 101:17 102:6,21 104:19 105:20 106:8,21 107:8 108:12 109:17 110:15,25 111:7 111:22 112:10,21 114:14,18,25 115:9,13 116:13 117:6,14 118:1,20 119:3 120:2,11 121:11 122:13 123:20 124:4,12 125:2,12 126:8,23 128:5,19 129:8 131:5 132:2,20 133:21 134:10,19 135:20 136:22 137:10 138:22 139:12 140:1,9 141:1,17 143:18 144:3,11,17,25 146:23 147:8,14 148:14 149:17,22 150:5,10,21 151:4 151:9,13,17,21 153:22 154:11,21 155:11 156:7,20 160:12,19 161:10 161:24 162:15,23 163:24 164:20 165:6,14 166:3,23 167:16 168:10,15 169:4,6,11,20 170:2,15 171:3,24 172:22 173:1,10	175:4,12,22 176:10,19 177:7 178:10 179:15 180:1,12,15,22 181:4,20 182:17 182:24 185:2,14 185:16,22 186:10 186:15,23 187:19 188:2,25 189:12 190:1,11,23 191:6 191:15 192:11,21 193:1 194:17 195:21,23 196:20 197:13 198:3,24 199:6,13,22 200:16,21 201:3,8 201:14,22 202:3,9 202:19 204:1,10 204:22 205:12,25 207:18 208:1,9,17 208:25 209:3,13 day 38:11 40:2 146:19 211:6 212:21 days 30:24 37:19 37:20,23 55:15 111:14 112:6 dealing 34:21 74:1 dealt 72:23 deborah 138:14 141:24,25 decelerated 86:13 deceleration 85:17 decide 18:23 19:6 64:6 92:4 149:15 150:4 decided 64:9 66:9 decision 58:10 66:19 80:21 81:15 86:2 116:23 149:12 163:5	decisions 19:3 81:7,12 137:5 149:25 150:15 162:5,13,14,18 deck 10:12,16 146:9,16,18 148:10 149:2,4,7 149:11 159:18,24 162:9,14,17 165:18 166:18 declare 211:1 declined 87:24 decode 87:11 deeper 58:16 define 91:11 defined 25:5 91:12 124:21 definitely 176:25 definition 38:13 39:5 49:16 71:13 86:25 133:18 134:25 172:10 definitional 95:3 110:4 degree 53:11 65:9 del 119:1 delivery 167:20 168:5 demographics 95:24 denver 6:10 dep 157:10 department 33:19 depend 22:15 24:25 56:16 93:25 depending 41:13 57:1 127:17 129:11 169:13 197:2 depends 166:10
--	---	--	---

[deponent - developers]

deponent 2:15 8:2 12:21 14:8,14 16:23 18:11,16,22 19:1,9,12 20:4,18 20:24 21:12 22:6 22:9,25 23:8 24:2 24:11,15,25 25:8 26:15,21 27:12,24 28:5,13,24 29:12 29:16,18,22 30:9 30:15 31:3,13 32:5 33:10,16,21 34:1,10,25 35:18 36:9 37:3 38:20 39:21 40:6,18,24 41:20 42:3,19 43:2,18,22 44:5,13 45:14 46:25 47:13 47:18 48:6,21 49:4,11 50:6 52:17 53:22 55:7 55:19 56:16,25 59:20 60:5,13 62:3,6,16 63:11 64:9,16,20 65:4 66:4,14,22 67:9,13 67:18,24 70:7,9,12 70:24 71:6 72:7 72:18 73:8,14 74:4,9,14,22 76:25 77:7,15 78:4,9,14 78:25 79:11,17,22 80:8,12 81:5,9 82:14 83:2,17,23 84:19 86:1 87:9 88:6,19 90:2 91:8 92:13 93:2,24 94:8,15 95:8,15,21 96:16 97:2,6,9,24 99:21,25 101:18 102:7,22 103:10	104:20,23 105:21 106:9,22 107:9 108:13 109:2,18 109:21 110:16 111:1,8,23 112:11 112:22 114:15,19 115:1,14 116:14 117:7,15 118:2,21 119:4 120:3,12 121:12 122:14 123:21 124:5,14 125:3,13 126:9,24 127:3 128:6,20,24 129:3,9 131:6 132:3,21 133:22 134:11,20 135:21 136:23 138:23 139:13 140:2,10 141:2,18 143:19 144:4,18 145:2 146:24 147:9,15 149:18,23 150:6 150:11,22 151:5 151:10,14,18 153:23 154:2,12 154:22 155:12 156:8,12,21 160:13,20 161:11 161:14,25 162:16 163:25 164:21 165:7,15 166:4,24 167:17 168:11,16 169:7,12,21 170:7 170:16 171:4,25 172:23 173:2,11 175:13,23 176:11 176:20 177:8 178:11,13,19,22 180:14,17,23 181:5,21 182:18 185:3,15 186:2,16	186:24 187:20 188:3 189:1,4,13 190:2,12,16,24 191:7,16 192:12 193:2,23 194:1 196:21,25 197:6 197:14,17 198:4 198:20,25 199:7 199:14,23 200:17 200:22 201:4,15 201:23 202:4,10 202:20 203:10,12 204:4,11 205:2,6 205:13 206:1 207:19 208:2,10 208:18 deponent's 1:15 deponents 212:7 deposed 15:15 deposition 1:12 2:14 13:6 14:11 15:19 16:3 57:11 58:14 60:24 67:21 81:18 185:6,21 201:1 204:18 208:22 209:17,22 212:14 213:19,22 213:24 214:8,10 deprecate 137:3,7 175:16 deprecated 85:24 136:24 144:2,4 155:20 165:11,16 175:10,11,21,24 176:1 190:21 deprecating 167:5 190:18,25 deprecation 85:16 137:5 155:23 157:1,11,19 160:17 163:21	190:5,8 deprecations 147:11 derek 4:8 13:18 describe 41:3 42:22 59:22 64:18 67:4 100:16 124:5 156:13 177:21 180:10 described 41:16 154:6 157:20 194:24 describes 133:8 159:22 165:16 describing 165:11 description 8:10 9:3 10:3 11:3 22:20 23:2 180:6 designate 209:4 210:8 designated 210:2 desire 12:13 95:1 desired 95:1,12 108:2 desktop 110:6 detail 185:8 details 58:10 81:11 113:10 186:18 determine 29:1 103:20 determined 213:18,22 214:7 determines 117:10 develop 123:8 developer 61:14 61:16 195:10 developers 9:23 11:6 61:19 64:24 68:4 103:19,20 104:8,9,17,24
---	--	--	--

CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

[developers - ecosystem]

118:11,13,18,19 118:25 119:1 130:22 131:8,11 183:24 184:22 development 130:25 device 29:9,14,20 30:7,10 31:11,14 34:22 87:2 97:20 97:25 98:12,14,18 99:3 100:1,9,12,13 101:4,6 116:24 164:24 165:5,8,12 devices 27:7,15 28:22 29:2 32:14 98:8 106:2 dgarrie 7:11 diana 146:6 dick's 161:7 dicks 161:2 difference 52:2 59:14 157:13 differences 45:8 different 11:11 19:18 21:5 25:18 25:22 39:7,8,10,12 40:25 41:11,12 50:2,3 52:6,7,8,24 53:19 56:25 57:9 57:9 66:7 67:5 90:10,15 99:22 100:3,4 104:16,25 116:5,5 123:24 124:15,17,18 127:18 133:9 152:22 153:11 157:20 163:23,25 169:13 172:20,23 194:4 199:25 differently 124:16	difficult 41:3 digital 123:8 125:20 dimensions 81:14 direct 21:5 31:23 52:3,5,10,11,25 53:1 72:4,8,14,18 103:21 112:5 113:23 163:16 187:2 189:8 194:5 195:6,9 direction 212:11 directly 32:21 163:14 178:24 179:8,19 180:20 181:13 director 159:5 directors 146:22 disagree 132:5 disclose 42:20 185:23 204:24 discount 51:12 54:10,11 discuss 47:6 58:13 61:8,11 81:18 115:5 170:17 185:12,19 186:4 201:2 204:20 discussed 38:14 61:9,16,18,20,20 81:16 89:15 115:24 118:4 122:16 126:21 137:20 200:14 205:3 discussing 28:21 130:21 136:11 163:22 discussion 56:19 64:22 66:23,24 68:2 131:21	170:17 183:2 198:10 discussions 61:13 62:7 81:12 148:6 208:19 display 135:6 distinct 19:15 23:13 distinguishing 64:13 distribution 110:19 district 1:1,2 2:1,2 divide 110:18 divided 37:9 46:4 48:7,18,23 49:6 dividing 34:18 46:1 48:3 dko 4:14 dloeser 4:16 doc 55:13 103:12 162:17 195:16 document 1:7 2:8 11:10 16:20,21 18:2,3,7,20 19:2,7 19:21 20:8,11 21:11,13 22:3,13 22:19 30:25 31:5 31:17 36:2 43:5 43:11,14 47:11 53:13,17 55:10,19 55:21,23,25 56:1 56:17,18 68:6,17 69:6,7 78:17,20 104:6 121:7 125:15 126:10,14 138:2 151:22 156:22 159:15 170:16,18 172:12 183:17 187:1 192:23 195:16	197:22 199:2 203:14,21 204:17 205:3,23 206:11 documentation 46:16 documents 20:7 36:5 37:7 44:1 46:13 47:10 53:18 53:22 54:2 55:14 156:4,9,13 208:14 doing 197:10 dollars 84:16 135:5 domain 9:13 download 193:24 drive 5:8 28:17 85:17 98:21 drivers 56:5 driving 171:6 drop 82:19,22,24 83:3,4,12,21 84:16 dunn 5:5 6:5 13:21 e e 3:7 8:1,8 9:1 10:1 11:1 57:22,22,23 75:19,19,19,20 86:8 213:1,9,12 214:1 e.g. 136:7 192:3 193:10 earlier 23:11 41:15 50:11 72:2 80:21 98:5 118:5 120:24 136:11 137:20 143:21 163:22 170:18 199:10 earliest 146:5 easier 139:2 ecosystem 165:19
---	--	---	---

[editing - exhibit]

editing 192:5	encompass 51:12	estimate 156:15	147:20 157:19
editions 127:23	encompassed 28:6	156:23 158:1	168:1,4 171:17
educate 68:9	encompasses	estimated 31:18	189:16,19
educated 68:11	122:4 123:6	140:4 152:5,20	examples 61:23
effective 171:5	encrypted 119:19	estimates 67:3	65:4 97:24 99:5
effectiveness	endeavored	estimating 141:12	105:4 106:22
104:15	209:21	estimations 66:18	exceeding 32:15
effort 157:23	engage 41:1,2,6	et 15:18 36:1	excel 11:14 193:4
either 26:4 36:13	55:20 132:1,5	100:6 118:14	195:1,2 203:8
37:18 76:1 80:10	134:17 155:16	164:18	205:14
102:19 193:5	engaged 38:6 39:2	europe 47:24	excerpt 8:21
202:13	105:14,18 141:15	evaluate 105:1	exchange 114:6,21
eliminate 152:3	142:6 186:12	event 25:5 26:7,9	114:23 115:7
eliminated 175:3	engagement 38:22	26:22 42:9 93:6	132:11 133:10,13
eliminating	40:4,15,21	116:9 117:13	146:13
173:24 174:10	engages 55:16	164:24 165:5,8,12	excluded 18:19
elisabeth 146:6	engaging 39:17	events 9:14 26:12	excludes 207:23
elliott 146:6	132:19,25 135:19	91:8,10,19,20 92:1	exclusively 123:11
email 9:12,22 10:4	engineering 92:18	92:9,11,13,15 93:4	125:19
10:10,20 11:4	93:3 97:14 111:9	93:6,9,21 96:25	execute 61:25
16:19 121:24	113:8	97:3,10,15 101:1,4	executed 121:10
125:18 130:21	enter 51:23 128:18	106:14 109:24	121:13 211:6
131:4,15,25 138:3	129:4,7	126:18 127:8	exercise 153:7
138:9 139:14	entire 48:23,24	128:3	exhibit 8:11,14,18
140:15 141:8	entirely 153:10	everybody 13:14	8:21 9:4,8,12,17
142:14 145:25	175:16,21,25	59:25 99:14	9:22 10:4,10,16,20
146:5,13,15 147:2	entities 84:17	evolved 21:23	11:4,10,14 12:20
148:11 158:20	175:8	exact 21:24 59:6	17:1,2,6,7,11,16
183:23 184:10,13	entity 133:19	60:19 81:11 84:20	17:20,22 29:24
185:3,6,7,12,20	136:11 137:12	117:8	30:1,13,19,21
186:7,8 187:17,21	eod 10:13	exactly 59:11	37:12,12,13 43:1,8
187:23 188:9	epsilon 143:15	167:25 195:3	46:21,22 47:2,2
192:14 193:22	equivocally	examination 8:2	50:10,12 51:6
194:24	166:12	15:5	54:16,17,21,23
emailed 131:15	ernst 55:3,9,20	examined 15:2	55:1 69:5,22,23
162:3	errata 213:14,16	example 26:11	70:4 103:4,5
emails 125:19,20	214:3,5	40:16 46:6 48:13	108:23,24 109:4
employee 212:18	essentially 65:9	52:14 71:23 82:4	113:22 116:17
employees 138:10	establishes 128:2	82:5 93:18 95:5	120:14,18 130:8,9
159:3	establishing	98:4,10,18 100:7	130:18 137:23
	151:24	106:14 125:19	138:1,8 142:22

CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

[exhibit - familiarizing]

145:24 146:11,14 148:18,24 149:2,3 158:12,18,19 159:1 183:9,12,18 183:21 184:4 193:19 194:19,20 203:4,8 exhibits 43:16 47:10 183:16 exist 21:11 84:10 136:25 137:9 155:5 196:19,23 existed 163:12 existing 32:13 96:9 exists 53:17 126:11 136:23 197:1 expanding 118:10 expect 111:24 expected 111:12 112:5 experian 143:16 164:6 167:1 experience 32:24 explain 91:23 156:9 explore 92:7 exploring 114:3 expression 44:19 extend 129:16 extended 129:19 extent 43:15 68:14 150:15 extrapolate 44:14 extrapolating 44:10 ey 9:6 55:1	f fabulous 178:18 facebook 1:4 2:4 5:4 6:4 8:11,18 9:4,18 13:7 16:2,3 16:7,9,11,12 18:4 18:6 19:4,6 22:3 22:12 23:25 24:2 24:16,19 25:3 26:13 27:6,18 28:22 29:2,8,13,19 30:6,10 32:24 33:7 34:5 35:5,13 35:23 36:1,12,25 37:4,20,22,22 38:11,17 40:3,14 40:21 41:7,16,24 43:20,23 44:1,8,17 44:23 45:1,12 46:14 47:15 48:1 49:8 51:5 54:13 55:3,14 58:8,13 61:10,15,25 62:14 63:9 64:6 66:9 69:6,9,11 70:22,25 71:2 73:12,17 74:1,5 77:24 78:1 79:8 81:1 82:11 83:12,19 84:11,15 85:23 86:5 89:20 89:23 90:7 91:4 91:18,19,24 92:11 93:21 94:3,12 96:11,12,23,25 97:19 98:9,11 102:3,18 104:1 105:14 106:5,19 107:3 108:7,9 110:7,18,21 111:19 112:8 113:3 114:5,22	115:6,10,12 116:10 117:1,10 117:20 118:17,19 118:25 119:2,13 119:23,24 120:7,9 120:22 121:1,10 121:25 122:5,6,11 122:18,25 123:2,7 123:10,11,15,18 123:22 124:23 125:9,22 126:5,12 126:17,21,25 127:11,21,23 128:2,17 129:7,14 129:17,21 132:1,4 132:18,25 133:3 133:13,17 134:9 134:12,17 135:2,3 135:18 136:20 137:2,11 138:10 138:16,21 139:3 139:16 141:5 144:22 145:5 146:22 149:15,21 150:4 156:4 159:3 161:8 165:4,10,23 165:23 166:11,19 166:21 168:20,23 169:10,16,17,18 170:24 171:11 173:8 177:17 179:5,10,23 181:7 181:9 182:3,4 184:16,18,20 186:12 197:10,20 199:5,11,21 200:14,19 201:6 201:12,17,20,21 201:25 202:7,16 207:20,21 213:4	facebook's 1:12 16:8,13 24:9 29:14 35:12,16 36:4 42:12 47:3 55:5 56:22 57:13 73:20 78:7,12,22 80:21 92:23 127:7 179:19,24 192:20 facing 37:6 fact 135:18 153:19 factor 51:11 factory 27:8 facts 63:3 fair 15:15 39:17 43:17 83:6 84:24 92:11 144:12 154:16 157:3 171:22 184:17 191:1 faith 43:12 fall 63:18 107:5 fallout 156:15 157:2 158:2 familiar 25:6 27:2 27:20 31:1 35:4 44:19 55:11 56:1 60:7 73:5,10 78:4 79:11,18 81:10 86:2 87:15,16 94:18 101:15,18 114:11 117:7,16 118:15 121:6 134:8 136:25 137:4 142:25 158:3 161:14 177:20,22 186:18 200:23 201:18,24 202:4,11,13 familiarizing 146:3
---	---	---	--

CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

[fas - form]

fas 104:1	205:22	floor 7:8	67:17,23 68:8
fault 125:6 148:16	financially 212:17	flow 10:6 21:3	70:23 71:5 72:6
fb 8:16 9:6,9,10,14	financials 35:12	focus 64:10	72:17 73:1,7,13
9:15,19,20,24,25	40:10 47:19	follow 201:13	74:3,8,13,21 76:24
10:8,13,14,22,23	find 22:9 86:7	following 148:10	77:6,14 78:3,8,13
11:7,8,16 55:1	121:14 129:24	186:13,21 187:25	78:24 79:10 80:7
110:9 120:20	142:5,7 161:3	189:23 190:7,19	81:4 82:13 83:1
130:14 138:2	168:13 189:24	191:3 198:2,17	83:16,22 84:5,18
146:1 147:3	198:23 202:15	209:18	87:8 88:5 90:1
183:22 207:12,15	fine 12:24 59:23	follows 15:3	91:21 92:12 93:1
207:19,20	68:22 90:16	131:25 198:11	93:23 94:7,14
february 192:1	185:25	213:8	95:7,14,20 96:15
federal 212:14	finish 170:3	fonti 3:5 13:15	97:1,23 99:20
214:1,8,9	185:17	food 96:3	101:17 102:6,21
fee 87:19	finished 207:9	forecast 85:12	104:19 105:20
feed 87:13,14	finite 63:16,16	86:14	106:8,21 107:8
feedback 131:20	firehose 61:20	foregoing 211:2	108:12 109:17
feel 63:2	65:22 66:9,20,24	212:5,7,11,13	110:15 111:22
feeling 84:8	80:22 81:3,19	form 16:22 18:10	112:10,21 114:25
feels 135:13 172:1	137:17,19	18:15,21,25 19:8	115:9,13 116:13
felt 62:22 63:25	firm 13:18	20:3,17,23 21:15	118:20 120:2,11
figure 49:1 91:24	first 17:19 31:5	22:5,24 23:7 24:1	121:11 122:13
figuring 153:7	35:9 48:15 57:22	24:10,24 25:7	123:20 124:13
file 119:18 122:17	81:24 91:18 92:1	26:14,20 27:11,21	125:2 126:8,23
183:19 193:4	92:8,19 98:4	27:23 28:12,23	127:10 128:5,19
194:1 195:1,2	125:7 131:18	29:11,17,21 30:8	129:8 131:5 132:2
filed 37:6,7	154:25 155:2	30:12 31:2,12	132:20 133:21
filings 42:4 43:5	156:3 164:25	32:4 33:8,15,20,25	134:10,19 135:20
43:16 47:4	165:13 169:22,22	34:9,24 35:17	136:22 137:10
filter 193:5	176:12,23,24	38:19 39:4,20	138:22 140:1,9
final 58:23 93:13	177:13,18 178:14	40:5,17,23 41:19	141:1,17 143:18
93:14	178:15,16 183:18	42:2,18 43:21	144:3,11,25 145:1
finally 88:25	195:4 204:9	44:4,12 45:13	146:23 147:8,14
finance 19:22,23	205:10,15,15	47:17 48:5,20	153:22 154:11,21
20:13 21:21 23:15	206:2,14,15 207:9	49:3,10 50:4	155:11 156:7,20
46:15 55:21 57:7	fiscal 23:17	52:16 53:21 55:6	160:12 161:24
59:12,14,17,18	five 30:23 55:15	55:18 56:15,24	162:15,23 163:24
60:8,15 61:3 75:1	195:18 202:23	59:19 60:3,12	164:20 165:14
76:2 93:8 204:7	fixed 51:25	62:2,5,15 63:10	166:3,23 169:20
financial 23:10	flaws 64:2	64:8,15,19 65:3,13	170:15 171:24
31:7 57:8 60:5		66:3,13,21 67:8,12	173:10 175:12

CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

[form - growth]

176:10,19 177:7 178:10 179:15 180:1,22 181:4,20 182:17 185:2 186:10 187:19 188:2,25 189:12 190:1,11,23 191:6 191:15 192:11,21 193:1 194:17 196:20 197:13 198:3 199:6,13,22 200:16,21 201:3 201:14 202:19 204:1,10 205:12 205:25 207:18 208:9,17 formed 93:12 119:20 formula 111:21 formulas 111:24 forth 24:8 84:16 127:23 140:16 212:7 forward 14:4 140:8,18 182:20 fou 136:22 foundation 91:7 151:24 four 47:20 88:8 90:17 155:19 172:20,23 177:12 frame 131:21 francisco 5:18 frcp 214:1 fred 168:16,17 200:8 free 114:4 frequency 93:24 frequently 39:2,18 80:17	friend 110:9 111:2 friends 110:20,22 front 54:2 fuel 62:8 full 150:25 200:1,2 functionalities 192:4 functionally 12:24 further 22:17 208:21 210:7 212:13,17 future 42:11 56:7 131:21 148:7 171:13 172:9 fyi 10:6 g g 34:3 57:17 gamble 52:19 71:24 72:3,11 96:20 gap 161:2,7 garrie 7:5 12:5,6 12:22 13:25 14:1 210:10 gather 123:7,17 gathered 122:24 123:2 gathers 124:2 gender 95:24 100:5 general 7:17 39:1 44:22 56:22 60:1 63:2 128:2 129:2 150:8 177:10,12 208:7 generally 19:14 54:7 70:24 104:6 109:22 121:23 123:1 generate 103:18 104:2 105:16	106:5,20 generated 42:16 107:5,10 109:15 109:16,22,24 generates 41:17 generating 19:19 106:12 geography 48:22 48:23,24 getting 63:3 109:14 138:14 198:8 gibson 5:5 6:5 13:21 gibsondunn.com 5:11,20,21 6:12,20 gift 54:8 give 14:11 27:22 52:14 193:23 given 37:8 38:11 40:1,2 45:7 46:3 47:9 56:5 70:18 71:7 110:23 152:24 195:17 212:12 giving 54:8 115:15 global 73:4 156:19 156:23 187:13,17 188:22,23 189:2,9 196:2,5,16,18,19 196:22 globally 52:18 88:8 155:1,5 gms 187:3,6,11 188:20 189:2,19 189:24 190:10,22 194:6 go 12:25 50:5 60:4 68:22 90:19 121:4 148:9,17 153:6,10 160:2 161:2 178:2	183:3 194:11,19 195:19 goals 33:4 goes 130:3 going 15:13 22:16 22:17 38:3 53:16 53:24 90:16 92:4 97:16 98:25 101:25 102:15 124:12 161:3 178:11 188:20 195:4,6 197:20 207:12 good 12:5,16 13:14,20,25 15:7,8 15:9 43:12 48:10 63:9 113:18 127:14,25 144:10 146:25 gradually 206:1 grant 6:14 13:24 granular 42:8 46:14 207:5 granularity 22:16 granulated 42:15 graph 139:4,16 great 17:14 42:24 57:20 70:13 88:10 88:24 89:14 103:1 113:11 130:6 182:21 207:11 greater 83:3,4 gross 16:8 20:2,4 134:2 group 53:15 groups 52:8,8 124:15 grow 63:22 growth 42:11 62:8 76:6 114:2
--	---	--	--

[gso - impact]

gso 193:10 guess 31:15 76:1 85:21 89:12 146:25 176:20 179:11 187:8,12 192:12 196:25 206:10 guesses 192:15 guessing 32:8 87:16 178:19 guides 128:7 guiding 8:15 gupta 141:24 142:2	heard 27:13 45:22 73:14,23 89:11 134:11 160:22,24 160:25 204:23 hearing 58:18 help 62:8 102:3 104:15 105:2 129:16 152:24 165:1 171:11 178:1 180:8 197:15 helpful 57:19 58:19 76:4 207:8 helping 13:17 104:1 hendrix 138:4,10 141:7 142:9 hereto 17:9 30:3 37:15 46:24 54:19 103:7 109:1 120:16 130:11 137:25 142:24 148:25 158:14 183:11,14 203:6 hesitating 36:9,17 171:25 197:1 hi 138:13 high 25:22 80:17 150:11 186:17 higher 48:13 hiher 163:14 historical 89:4 191:25 historically 73:21 100:8,10,11 171:15 hit 140:21 hold 208:22 holistically 48:22 hope 130:7	hopefully 12:9,11 horton 188:12,13 host 97:12 hour 59:1 hours 29:9 house 12:8 81:25 82:2,12 huawei 28:10 huh 19:5 69:24 152:21 hyphen 52:3	identifiers 97:20 97:21,25 98:19 100:2,10 101:5,6 116:11 121:24 122:7,12 124:24 124:25 125:9,11 125:14,18,23 126:6,13,14 identifies 174:6 identify 13:12 39:21 51:7 83:19 83:24 113:2 116:6 144:15,19 151:2 154:23 155:3 169:15 171:16 172:11 189:22 190:20 199:4,20 206:13 identifying 99:19 155:17,18 identity 136:6,14 136:17,21,25 169:1,5,10,16,17 169:25 170:1,9,12 170:14,21 171:1,2 171:20,23 172:6,7 idfa 99:7,18 103:17 105:15,25 108:10 116:23 117:21 118:9 idfas 118:11,18 119:1 ids 139:3,16,17 igf 87:18 igs 87:19 illustrate 104:15 imagine 42:3 48:11 84:11 impact 10:7 11:12 83:20 141:10,12 142:13,19 152:22
h		i	
h 8:8 9:1 10:1 11:1 57:22,22,23 75:19 half 59:1 hand 14:7 23:4 69:16 85:1 87:14 handled 111:2 213:8 hands 12:16 happen 25:9 91:9 93:5 106:15,25 147:12 173:5 happened 93:10 106:14 107:1,17 119:6 186:25 191:8 208:19 happening 119:5 hard 63:12 65:19 74:22 76:14 191:16,16 hashed 119:19 head 57:21 header 87:23 headers 23:9 hear 12:11 156:1 204:2		i.e. 114:5 117:12 123:11 ia 87:16 88:21 ian 7:17 13:24 idea 18:13 61:18 61:20 62:6 65:19 117:17 152:17 168:4 ideas 65:17 iden 170:9 identifiable 119:16 identification 17:8 30:2 37:14 46:23 54:18 103:6 108:25 120:15 125:24 126:7 130:10 137:24 142:23 148:24 158:13 171:23 183:10,13 203:5 identified 22:22 68:14 174:15 175:8 187:4 194:6 194:15,21 208:15 identifier 99:3 106:1 116:22,22 116:25	

[impact - interpretation]

152:25 154:24	inci 36:24	107:4 108:3,17,20	instances 115:15
155:22,23 156:25	incidentally 36:25	111:4 114:7	127:4 199:8
157:5,7,10 161:18	include 18:24 19:3	116:11 119:12,14	200:18
173:24 174:10	95:5,24 107:11	119:16,25 122:18	instant 87:17
179:25 190:5,18	122:15 124:22	132:12 135:3	88:21
191:10,14,18	189:19	143:10 155:16	instragram 87:19
192:9,10,16,25	included 26:9	169:18 185:1	instruction 209:22
194:4 197:10,24	28:10 51:14 139:6	186:20 189:15	integrating 73:19
198:14	145:14 153:5	190:9	integrity 79:17,20
impacted 193:9	213:14 214:3	inherent 64:18,21	89:13 136:3
195:24	includes 97:12	initial 131:20	intended 43:13
implemented	125:17	initials 87:4,6,9	interact 41:11
107:12,14	including 16:10	input 154:9	interest 96:1 100:6
implications	20:20 97:11 100:5	inputs 21:11	interested 96:2,3
151:23 152:2	107:4 123:11	106:16	96:17 97:7 100:19
173:18	210:4	inquiries 202:21	101:22,24 102:14
implicitly 36:16	increase 168:6	inquiry 190:7,19	136:13 152:16
imply 140:7	indicate 26:5	202:15	190:14 212:18
156:25	209:18	insert 51:19	interesting 132:12
important 40:9	indications 115:20	insertion 51:13,20	137:15
42:5,10 98:18,23	indicative 12:13	52:3,4 53:14	interests 125:25
104:10 111:25	individual 42:15	inside 52:23 99:1,1	interface 206:16
171:4 172:2,6,7	42:17,22,23	insight 124:8	206:18,23,24
impression 26:6,6	100:14 108:18	insights 27:9	interfaces 26:3
26:22 86:22 89:16	individuals 39:22	123:9	92:22 95:23
90:22 172:9	65:10 106:24	instagram 87:19	128:11
206:19	108:18 116:6	123:12	internal 33:6,7
impressions 26:9	170:23	install 26:16,19,25	69:6 83:14 94:4
28:15,17 86:21	industry 127:18	63:23 93:21 98:20	138:9 146:15
89:24 90:3,9,18	134:2 165:24	100:21,25 116:2	184:10
91:1,2 92:10	infor 64:23	installed 112:6	internally 49:5
96:22 97:3,11	inform 58:10	116:8	82:4 101:11,13
117:12 126:19	information 16:10	installing 98:24	134:9 143:19
150:13 176:7,8,14	16:12,13,16 19:7	installs 27:19	168:23
206:16,17	20:10,22 22:1	28:17 31:23 64:6	internet 12:23
improve 169:1	23:1 28:22 29:4	90:23,25 92:11	interpret 110:16
170:1,13	33:22 42:5,16	93:19 98:21	177:11 191:17
incentive 31:7	49:9 64:25 65:2	106:15,24	interpretation
incentivize 54:12	65:15 98:15 99:3	instance 32:12	124:14 140:15
incentivized	104:13,14 106:10	34:20 39:12	176:22,23 180:23
132:15	106:13,19,23		181:5 204:11

CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

[interpretations - kubitz]

interpretations 180:10	139:2,14 148:18 192:13	keying 117:21 kill 163:5	115:10 117:9,24 118:2 121:12
interpreting 170:19	issues 9:8 item 26:1	killing 160:8 kind 19:16 52:25	126:13 127:19 129:20 131:1
interrupt 170:3 introduced 17:16	items 50:17 iyer 75:17	53:3 58:10 90:23 93:12 100:6	135:10 138:5 139:1,22,24 141:4
30:14 54:24 158:17	j	124:25 126:22,25 127:5,22 141:6,7	141:14,18,23,25 142:2 143:21
intuitive 19:17 inventory 129:23	james 158:21 159:10 160:7,13 163:1	154:24 155:4,23 172:8,11	145:12,19,20 148:3,16 150:25
135:6 investigated 189:23	jamie 161:21,23 161:25	kinds 21:5,8 65:1 65:14 149:25	152:12 153:2 156:12,25 157:4,4
investigating 186:13 187:24	jams 7:4 jamsadr.com 7:11	172:20,24 kito 183:23 184:10	157:6 158:6,24 159:24 160:13
investment 64:10 investments 64:4	january 78:11,21 javier 145:25 146:5	184:11 188:8 know 16:5 17:24	161:7,9,12 162:12 164:17,21 165:4
investor 142:4 investors 42:6,10	job 1:24 213:5 john 7:19 13:9	19:20 21:6,7,9 24:22 28:14,20	165:15 167:24 168:11,16 169:9
42:13 142:1 invoice 23:23 94:5	jon 188:12,17 jsc 1:6 2:6	30:15,19 33:10,16 34:10 35:22 36:14	174:3,18 175:2,7 180:3 184:1,12,18
invoiced 23:19,20 26:1 51:15	june 183:22 192:2 junk 193:15	36:25 41:5 42:3,8 42:10 43:9,19	184:19 187:6,7,11 187:20,22 188:5
invoices 93:16,19 93:25 94:9	justin 61:2 67:18	47:6 52:18 53:5 54:2 55:4 59:21	188:14,18 190:2 200:2,4,6 201:19
involve 66:2 involved 57:13	k	60:1,13 62:16 63:14,20 64:20,22	201:25 202:6 203:13,23,25
74:19 75:2,22 76:2 97:25 112:19	k 3:6,9 57:22 75:19 79:24	65:6 66:14 67:6,9 67:11 69:14 70:14	204:6 knowing 100:20
113:2 168:14 involving 28:1	karma 54:5 136:7 136:10,20,23	74:9,11,19,25 75:13 77:11 78:9	knowledge 29:18 29:22 34:7 80:12
io 51:22 ios 116:19,20	137:9,11 keep 36:20 45:4	78:10,21 79:7,14 85:20 86:3,6,25	80:14 119:7 127:3 133:6 139:5 186:7
iphone 99:15,16 irvine 5:9	94:8,15 keller 4:5 20:1	89:10 93:6 94:16 97:13 98:20,23	188:3 195:14 200:22
iso 52:4,5,20,21,23 53:3	kellerrohrback.c... 4:14,15,16	100:1,3,5 101:23 101:25 102:14	known 22:20 ko 4:6 13:19
isolate 32:13 110:22 155:9	kevin 65:11 key 9:8 163:12	103:8 104:24 106:5 109:8,15,21	kochava 105:5,11 kristy 163:4
issue 80:17 132:18 132:24 133:2,3,6	167:4 171:20 keyed 103:17 105:15	111:5,6,9,19 112:13,17,18,25	kubitz 79:22
		113:5,7 114:16	

[l - look]

l	leadership 56:8,10	111:12,16,17,20	118:5 131:14
l 1:20 2:19 57:22	leading 165:24	111:25 112:8,14	135:24 140:6
86:9 212:1,24	leads 58:23 60:1,6	112:20,23 113:3	161:1,19 162:2
l'oreal 9:18 120:22	74:7,10	lift 172:16,25	177:23
120:25 121:2,9,17	learn 33:17 80:3	178:4,9,17	llp 3:5 5:5 6:5
121:23,25 122:3,5	leaving 10:17	lighthouse 167:12	load 30:5 206:25
122:17 123:1,6,7	148:11 150:1	167:15,24 168:4,9	loaded 43:1
123:16,16,18	lee 1:13 2:14 8:3	168:14,22 199:17	loading 37:17
124:21,22 125:17	12:6 13:6 14:6	limit 149:25 150:4	loads 87:1
125:20 126:4,11	15:1,7 17:11,15,25	150:15	located 2:15
126:19	25:12 27:22 55:5	limited 16:11	location 1:15
l.l.p. 4:5	68:19 113:18	line 26:1 50:17	95:25 100:5
l28 112:6	149:1 180:12	63:18 76:22 96:4	locked 213:12
label 72:18	183:15 184:2	112:7 131:13	214:1
labeled 11:14	185:22 197:24	146:17 172:5	loeser 4:8 13:18
30:25 76:10 147:2	198:13 203:7	213:15 214:4	log 39:25 91:8,19
203:9	204:22 206:7	lines 76:16 96:1,4	92:2 97:10,15
laid 50:10 127:11	209:2 211:1,13	202:21	logged 35:13
landed 38:5	213:5	link 26:10,10 90:3	36:21 37:21 38:11
language 124:15	left 23:4 85:1	90:22 92:10	91:18 187:3 189:9
large 19:14 23:13	174:15	171:12 172:3	logging 92:15,17
50:19 59:20 63:14	legal 213:7	linked 173:15	92:20,21 109:24
183:20 193:10,20	lengths 39:10	links 90:24	111:2
largely 12:13	lesley 3:7 13:15	list 41:2,4 65:17	logs 92:11
larger 53:1 72:11	213:1	79:6 96:9 143:14	long 41:3 45:3
128:14 187:14	lessin 131:15	143:25 144:6	58:25 61:5 65:17
largest 52:12,18	level 25:23 75:6	150:25 168:12,14	111:3 143:14
laufenberg 4:7	127:15 150:11	194:12,14,23,23	190:12
launch 115:2	155:6 164:24	195:1,2,10 197:8	longer 44:25
launched 66:1	165:5,8,12 172:17	200:2	116:20 136:23
114:17,20 201:20	175:1,15,25 176:6	listed 71:24 72:15	159:13 195:1
laura 19:25	186:17	120:25 154:3,19	look 23:17 33:19
law 3:10 4:9 5:7	levels 53:5	lists 88:13 118:11	42:25 43:9 46:18
5:15 6:7,15	leverage 99:3	118:18 167:11	49:5 56:10,19
lawyer 60:24	100:9	172:15 193:14	76:9,21 92:3
186:4	leveraging 135:3	194:20	108:23 110:19
layer 127:16	lifetime 101:16	literally 21:3	111:3 120:17
lays 36:1	102:1,3,16,19	litigation 1:6 2:6	130:7,13 145:24
leach 168:16,17	103:18 104:2	13:8 213:4	148:4 154:23
200:8	105:16 106:7,10	little 23:17 38:3	173:22 179:24
	106:17,20 108:11	69:15 76:14 89:15	183:18 192:9

CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

[look - measured]

193:18,20 207:11 208:4 looked 149:24 looking 20:24 22:18 30:18 31:4 31:16 34:12 43:8 43:11 45:25 46:7 48:21 51:6 56:12 58:15 59:21 69:4 69:13 76:5 81:21 82:17 87:3 104:21 110:3 111:10 112:1 116:16 122:23 124:19 125:8 131:9,14 140:7 154:25 157:14 159:15 161:19 164:2 165:18 167:9 177:9 182:7 187:1 187:16 193:3 204:5 205:17 looks 32:5 56:4 179:18 195:1 203:15 lori 20:1 los 7:9 lose 192:4 lost 190:16 lot 58:9 63:24 lower 69:15 84:25 86:13 131:14 135:25 161:1,20 162:3 loyalty 125:21 ltv 112:5 lweaver 3:15 213:2	m m 57:22,23 mac 116:24 macdonell 7:19 13:9 machine 212:10 main 51:16 58:21 200:11 maintain 45:1 110:23 maintained 94:12 maintains 21:7 major 28:6 88:8 90:23 majority 50:19,25 64:10 making 42:21 81:7 138:14 149:8 159:22 managed 91:12 163:6,8 manager 159:12 managing 121:16 192:5 manufacturers 27:7 map 34:19 mapped 52:7,12 march 147:3,10 158:22 160:8 mark 16:25 29:23 37:11 46:20 54:15 131:16,17 138:1 142:21 158:11 162:14,19,21 mark's 146:8 marked 17:7,20 17:23 30:1 37:13 46:22 54:17 103:5 108:24 120:14 130:7,9 137:23	142:22 148:24 149:2 158:12 183:9,12,16 193:19 203:4,7 market 32:14 201:19 202:17 marketing 16:14 51:14 53:6 73:18 73:20,22 74:5 187:13,14,18 188:22,23 189:2,9 marketplace 23:19,20 26:1 51:15 marking 158:16 master 7:6 12:5,6 12:8,22 13:25 14:1 210:10 match 115:18 163:14 164:25 165:5,9,12 170:21 171:1 matched 122:6,11 124:23 125:9,22 126:5,12 matching 115:19 125:4 126:22 127:1,5 163:12 165:12 170:17,20 mathematician 179:11 matt 29:24 35:8 46:20 89:18 matter 13:7 128:2 131:4 172:4 184:21 186:8 matthew 3:8 13:17 mau 8:18 43:6,20 43:24 44:2,10 46:6,8 48:2,8,13 48:17,23 49:1	maximum 139:20 202:1 md 1:6 2:6 mdl 1:4 2:4 8:16 9:9,10,14,15,19,20 9:24,25 10:8,13,14 10:22,23 11:7,8,16 120:20 130:14 138:2 146:1 183:22 mean 22:25 23:3 23:19 25:13 37:7 38:1 45:15 51:3 62:13 67:1 77:16 77:20 78:15 80:8 96:23 107:15 122:10 136:4 137:6 138:20 143:8 153:18 155:19 162:13 164:18 166:2 167:23 169:12,18 170:2,9,12 171:2 173:8 177:6 181:3 189:11 190:25 191:14 204:9,14 meaning 15:17 38:6 70:21,25 191:17,18 means 32:19 77:4 85:20 86:21 89:10 125:23 169:10,16 169:25 171:23 178:8 180:21 meant 28:16 162:17 measure 39:9 41:13 45:3,5,6,10 82:15 104:10 measured 178:25 179:9,19 180:21
--	--	--	---

CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

[measured - name]

181:1,13 measurement 96:13 103:14,18 104:2,7,9,14,18,25 105:4,15 106:7,11 107:22 108:4,10 108:15,17,20,21 123:25 124:6 149:12,16,24 150:1,4,13,19 156:15 157:2,6 158:2 159:23 162:4 165:20 172:15,17,21,24 173:9,13,14,25 174:11,24 175:9 175:14,16,19 177:3,14,16,18,21 177:22 178:4,16 180:25 181:1,8,11 181:18 182:11,20 mechanism 99:18 mechanisms 92:19 93:4 96:22 97:15 123:6 medium 196:15 meeting 146:8 163:3 melamed 3:8 13:17 17:2,4,18,21 17:22 30:13 54:23 158:17 members 37:1 57:12 75:21 memorandum 9:17 120:21 memory 117:1 150:7 mentioned 28:1 41:8,10,14,20 65:21 152:21	176:22 message 10:21 38:7 160:15 messaging 10:11 146:8,18 messenger 35:13 37:20,23 38:11 87:18 123:12 meta 7:18 13:22 13:22,24 142:9 159:14 209:15 meta's 209:24 method 94:1 173:5 methodologies 11:11 194:4 methodology 44:9 methods 116:5,5 metric 38:18,21 42:13 96:13 189:19 metrics 11:15 39:8 40:4,8,14,20 97:13 102:8 189:20 203:9 204:12 206:5 mf 87:13 mgr 87:18 michelson 5:8 middle 68:17 milli 86:20 million 139:20,20 140:20,20 152:6 152:19 156:16 179:12 191:11 mincer 60:16 mind 61:24 65:19 75:4 97:24 105:12 129:12 143:15 145:2 169:23 172:11 200:9,12	minimum 139:19 minute 17:19 minutes 61:7 202:23,23 missing 91:14 mission 5:16 mitigate 157:18 mitigation 157:23 mmelamed 3:16 mmp 174:14,23 177:14 mobile 28:7,17 63:22 64:6 87:13 98:6,19,21,22 100:17,17,18 103:14,16 104:6 104:11,13,18 105:4 107:22 108:4,6,16 114:4 115:24 116:2,17 172:16 174:24 175:14 201:6,13 model 62:12 132:14 133:8,15 143:24 models 62:7 114:3 168:6,24 moment 27:22 43:9 44:8 47:5 156:24 158:23 184:2 monetization 11:15 16:15 32:15 130:22 203:9 204:9 monetize 204:12 204:15 monetized 16:11 money 25:15 145:12,13,14 181:9 204:16	monies 77:22 month 37:19 202:7 monthly 23:22 34:14,18 37:9,17 39:3,6,13,16,19,22 39:23 40:1,13 42:1 46:1,5 49:7 56:14 76:10 77:19 93:20 months 46:11 morning 12:5 13:14,20,25 15:7 move 14:4 145:23 165:17 195:5 197:20 moved 140:18 155:22 moving 157:20 160:3 182:19 mta 174:14,21 177:14 multi 163:12 172:16 174:22 175:14 multiple 91:16 mz 162:5,13,20 n n 8:1 34:3 57:17 57:23 75:19 name 12:6 14:1 19:25 26:17 33:11 57:22,23 59:25,25 60:14 74:12 75:14 75:20 79:19 86:8 114:7 117:17 127:18 130:15 151:3 187:14 188:6,9 189:5 199:4 200:7 212:21
--	---	--	--

CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

[names - objection]

names 20:24 21:24 67:10 104:21 105:8 113:5,7 143:13 187:16 narrow 210:2 narvaez 158:20 159:4 natalie 79:22 native 183:17,19 necessarily 24:7 39:7 64:2 necessary 213:14 214:3 need 10:11 17:15 22:6 35:22 36:13 36:14,19 57:1,5,8 57:10 121:21 146:18 170:3,21 171:1,12,15 189:16 190:9 needed 153:6 171:16 needs 104:25 172:3 negotiated 127:17 neither 212:17 neko 28:14,16 nested 127:19 net 16:9 20:2 network 51:12 87:20 129:14,15 129:22 130:2 134:1 135:3,22 networks 21:6 29:3 nevada 1:22 never 126:21 157:15 new 17:16 42:23 157:21 161:3	news 66:5 147:9 148:3 ng 57:17 nielsen 151:5,12 174:6 night 16:20 208:15 208:19 nonprofits 82:7 nordstrom 161:2 161:7 normally 127:10 north 88:3,9 165:22 166:2,19 182:13,19 northern 1:2 2:2 nos 55:1 130:14 183:22 notating 213:15 214:4 noted 210:10,14 notes 211:3 notice 16:2 noticing 13:13 notion 171:20 number 8:9 9:2 10:2 11:2 16:5 17:3 22:17 28:18 37:9 39:25 41:22 42:21 48:14 51:25 63:16,16 69:19 70:10 86:23 90:5 93:13,14 95:21 106:23,24,25 110:20,22 112:1 145:19 149:24 150:22 153:4 176:13 177:2,15 177:16 195:23,23 209:25 213:15 214:4	numbers 46:17 69:15,15 84:7,10 84:23 152:15 153:1 156:5,10 181:12 numerator 50:7 o o0o 12:3 210:19 oakland 3:13 99:15 oath 15:2 113:19 212:9 ob 33:8 179:15 oba 134:8,12 obj 95:20 object 16:22 18:10 18:15,21,25 19:8 20:3,17,23 22:5,24 23:7 24:1,10,24 25:7 26:14,20 27:11,21,22,23 28:4 29:17,21 30:8 31:2 32:4 33:8,15,20,25 34:9 34:24 35:17 38:19 39:4,20 40:5,17,23 41:19 42:2,18 43:21 44:4,12 45:13 47:10,17 48:5,20 49:3,10 50:4 52:16 53:21 55:6,18 56:15,24 59:19 60:3,12 62:2,5,15 63:10 64:8,15,19 65:3,13 66:3,13,21 67:8,12 67:17,23 68:8 70:23 71:5 72:6 72:17 73:1,7,13 74:3,8,13,21 76:24 83:1,16,22 84:5,18	87:8 88:5 95:7,14 95:20 96:15 97:1 99:20 101:17 105:20 106:8 107:8 108:12 109:17 110:15 112:10 124:12 126:23 128:5 131:5 132:2,20 133:21 134:10,19 135:20 146:23 147:8 153:22 156:20 164:20 166:3 179:15 180:1 181:4,20 196:20 197:13 200:16,21 201:3,8 204:10 205:12,25 207:18 208:9 objection 21:15 28:12,23 29:11 31:12 36:8 37:2 43:14 47:8 77:6 77:14 78:3,8,13,24 79:10,16,21 80:7 81:4 82:13 85:25 90:1 91:7,21 92:12 93:1,23 94:7,14 97:23 99:10 102:6,21 104:19 106:21 110:25 111:7,22 112:21 114:14,18 114:25 115:9,13 116:13 117:6,14 118:1,20 120:2,11 121:11 122:13 123:20 124:4 125:2 126:8 128:19 129:8 136:22 137:10
--	---	--	---

CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

[objection - option]

138:22 139:12	occur 23:6 98:22	47:13 50:14 51:10	210:12
140:1,9 141:1,17	occurred 139:11	53:16,24 54:14	old 163:11
143:18 144:3,11	139:11 166:9	55:8,22 59:5 61:8	olivan 145:25
144:17,25 147:14	186:17	63:1 65:14,21	146:5
149:17,22 150:5	odc 164:6	68:16,18,24 69:13	olr 174:14,25
150:10,21 151:4,9	oem 27:5	69:18 70:9,13	177:14
151:13,17,21	offer 90:6 94:23	71:10,17 72:13	onavo 200:24
154:11,21 155:11	95:21 96:5 99:23	74:11,16 75:3	201:2,7,12 202:7
156:7 160:12,19	100:12 101:7	79:7 81:21 84:10	202:11
161:10,24 162:15	104:8,9 129:21	85:9 88:18,20	onboarded 163:14
162:23 163:24	134:23 143:5	89:2,14 92:4	onboarder 163:11
165:6,14 166:23	167:2	94:11 95:11 99:4	onboarding 160:9
167:16 168:10,15	offered 73:21 98:1	101:15 103:3	160:22
169:4,6,11,20	99:2 100:9 145:11	108:22 109:2,12	once 44:24 93:14
170:15 171:3,24	offering 67:4	109:21 111:10	138:24
172:22 173:1,10	147:19 168:2	112:3 113:11,13	ones 40:9
175:4,12,22	offhand 34:11	113:22 116:16	online 134:15,17
176:10,19 177:7	55:7 59:9 60:13	117:19 118:4	134:20,23 143:12
178:10 180:22	74:9,23 78:9	121:4,18,22	173:4
182:17 185:2,14	145:19 158:4	122:20 124:19	onwards 50:19
186:10,15,23	168:11	125:16 126:15	open 17:13 18:1
187:19 188:2,25	office 213:11	131:3,14 137:15	46:25 194:1
189:12 190:1,11	officer 60:6	137:22 138:7	208:23
190:23 191:6,15	official 101:10	142:5,11,20	operated 35:23
192:11,21 193:1	offline 143:11	146:14 151:20	operations 75:11
194:17 198:3,24	oftentimes 53:4	154:1 155:8	operators 31:6
199:6,13,22	oh 14:6 38:23	156:12,14 158:10	opportunities
201:14,22 202:3,9	46:21 70:5 85:2	158:25 160:2,16	63:17 68:3,4
202:19 204:1	105:9 125:5	161:1,16 162:2	80:25 130:22
208:1,17	148:15 169:16	164:23 165:17	131:7 132:4,6
objections 80:11	170:6 209:6	169:14 177:1	opportunity 62:22
119:3 125:12	okay 12:22 13:2,2	178:21 180:7,14	66:16 67:4 122:17
161:17 209:18,23	13:4 14:5 15:13	181:2,23 182:21	131:18
objective 208:12	15:17,25 16:6,18	183:1,4 184:3	opposed 34:22
objectives 69:20	16:25 18:2,17	188:20 191:9,22	37:1 41:25
obtain 155:15	20:14 22:2,8,18	192:19 193:25	opt 118:13
197:11	24:19 25:2 29:16	194:2 195:4,19	option 26:4,15
obviously 21:9	30:18 32:9,22	197:16,19 199:1	62:9 90:6,13
occasions 119:24	33:5,13 34:12	202:22 203:10	100:12 143:4
120:9	35:2 38:9 43:18	205:10 208:4,6,13	144:21 147:25
	44:7,15 45:20,23	208:25 209:8	153:9 175:24

[option - partners]

193:23 options 26:8 61:13 61:15 62:10,19,20 62:23 63:6,24,24 64:2 68:3 95:22 95:25 98:1 99:2 99:23 100:9 101:7 108:1 134:24 145:11,16 157:21 168:3 oracle 151:14 174:6 oracle's 21:7 order 1:10 17:17 22:22 51:19,20 53:14,17 100:24 171:11 172:17 175:1,15,25 209:5 210:9 orders 51:13 52:3 52:3,4 oregon 1:22 org 52:7 53:1,12 75:25 188:15 189:14 organization 52:24,25 72:8,9,20 73:4 75:8 159:9 187:15,18 196:7 196:11,13 organizational 60:8 organizations 52:6 95:5 189:15 original 194:24 212:14 213:10,21 originally 100:16 originated 103:22 123:1 osofsky 61:2,6,17 67:18 81:17	outlines 203:20 outlining 149:7 203:15 outright 199:25 outside 129:17 209:19,20 210:1 overall 38:21 49:21 192:13 205:11 owned 35:23 194:7 ownership 153:1 oxygen 27:3,5,10 27:18 28:9 32:14 33:12,14,18 34:19 ozone 8:15 30:25 31:1 p p 45:18 75:12 p.m. 113:14,17 148:20,23 183:5,8 202:25 203:3 209:9,12 210:13 210:14 pacific 13:5 page 8:3,9 9:2 10:2 11:2 31:5,17 69:14,16,25 71:11 71:15,17 72:15 74:17 78:17 81:22 82:18 85:10 86:12 88:4,11,16,25 103:13 109:13 110:2 111:11 112:4,4 113:24 116:18 118:9 121:18 133:25 149:10 151:21 152:1 161:3 162:25 164:2,2,3 165:18 167:9	173:17,22 174:9 178:2,11 182:7 194:3,20 195:4,13 204:5,9 205:11,13 213:15 214:4 pages 1:25 22:18 23:11 88:12 191:24 192:5 194:7 213:14,17 213:17 214:3,6,6 paid 23:22 27:18 54:12 91:25 94:5 94:10 126:18 199:5,9,21,23 201:6,12 202:7 paired 27:8 paper 125:21 paragraph 125:6 132:9 paragraphs 122:21 125:7 parameters 107:12,14 108:8 park 188:12,17 part 23:24 27:13 33:2 59:16 66:18 72:4,8 89:23 103:16 104:7 114:1 128:6 147:12 187:17 189:6 192:18,20 192:20 194:22 196:6,10,12 particular 20:14 29:6 56:17 74:4 142:8,12 parties 3:2 4:2 5:2 6:2 7:2 24:20 25:4 25:4 29:20 91:5 92:3,3,25 97:19 106:17 107:6	116:12 120:1,10 128:24 167:8 199:4,11,20 200:15 partner 13:19 51:24 82:7 107:23 108:16,17 129:15 143:1,3 144:1,5,7 144:9,16,20,24 145:7,10,14,17 147:11,15 148:7 149:12 152:3 153:5,9,20,23 154:3 157:1,5,8,10 157:11,15,16,19 160:17 163:22 165:19 167:5,8,11 167:19 168:1,3 174:4,20 175:23 176:9,12,14,17 199:16 partnered 27:6 144:7 147:24 partners 23:25 24:3,9 27:10 28:9 28:25 52:13,15 66:5 73:6,11,12,18 73:22,23 74:2,5 92:23 93:20 96:14 102:5,20 103:14 103:18 104:2,7,14 104:15,18,21 105:5,16 106:7,11 106:12 108:4,10 108:21 143:6,8,21 144:6 147:24 150:14,19,23 151:1 167:19,23 167:25 168:1,8 172:17 173:14 174:14,18,19,24
--	--	--	---

[partners - platform]

175:15,18,20 176:5,9,13,17 177:19,20 178:5,7 178:8,22 197:8 198:1,16 199:15 200:2 partnership 27:13 33:2 partnerships 21:8 27:25 29:1 33:5 33:21,24 98:5 163:1 166:25 168:18 188:19 200:5 party 91:25 102:4 125:1 128:23 135:14 143:5,7 160:9,22 162:9 164:25 165:13,19 170:19 212:19 path 64:11 pay 24:20 25:4,12 51:25 77:12,16 90:4,22 92:4 136:20 147:22 200:19 paying 9:23 51:4 93:17,21 96:14 128:8 131:11 167:1 199:25 200:14 payment 24:6,13 24:20 25:13 26:13 26:16,19 89:24 90:2 91:6 93:25 127:8 202:1 payments 24:5,15 31:24 pays 114:5 202:17 pc 162:4 173:24 174:3,14,18	175:20 176:5 177:19,20 178:5,7 178:8,22 pdf 213:12 214:1 penalized 79:8 penalty 14:10 211:1 213:16 214:5 pending 180:13 people 28:19 29:4 33:19 36:6,18,21 36:22 37:1,18 38:10 39:7,9,12,25 41:1 44:24 45:7 45:22 60:10 65:5 67:10 92:19 95:23 96:2,2,7 98:9,13 100:24 112:2 113:5 116:1,2 124:18 132:14 134:7 139:5,15 143:10 153:24 154:5 167:21 168:7 170:23 171:13,13,16,18 173:15 187:16,21 187:23 200:5 people's 65:6 134:22 148:5 172:6,7 percent 63:14 76:6 82:22,24 83:3,4 176:2,24 179:12 179:25 181:18,24 182:4 percentage 84:7 85:21 130:4 179:4 179:23 182:2 perfect 193:25 perform 48:1 190:10 197:11,17	performance 117:11 performed 66:18 152:13 179:22 197:25 198:14,23 performs 141:5 peri 120:8 period 18:5,22 19:19 22:1 23:14 37:9,10 40:1 45:7 45:8 46:4,5,9,11 50:18,23 51:1 52:6 53:2 72:20 84:13,20 97:22 105:17,18,22,24 109:10 112:18 120:8 139:24 140:3,13 150:14 182:5 195:17 213:18 214:7 periods 50:3 85:7 94:17 perjury 14:10 211:2 213:17 214:6 person 34:1,14,23 35:12,19 36:11,12 39:11,13,15,17,18 41:6 59:22 67:19 79:23 80:2 100:20 100:22 107:25 110:20,22 111:18 116:8 136:16 200:8,11 person's 136:6 personal 114:7 133:25 personally 119:15 pertains 212:13 pertinent 42:20	phased 53:8 phone 27:6 99:19 114:8 phone's 117:1 phonetic 28:10 phrase 73:5,9 134:8 160:22,24 170:25 188:20 phrased 145:9 phrases 72:22 piece 127:17 132:12 140:11 pii 164:24 165:5,8 165:12 pipelines 21:4,5,25 93:5 pixel 122:25 123:6 123:16,22 124:2 125:4 place 124:23 166:25 167:18 212:6 places 19:18 87:10 197:2 plaintiffs 2:15 3:4 4:4 13:16 planning 194:25 platform 10:18 23:22 25:17 28:19 29:5,5 37:22 38:22 39:3,9,18,25 40:15,22 41:1,12 44:25,25 45:7 61:10 65:10 67:14 67:16 95:10 109:10,25 112:17 122:6,12 123:19 125:9 126:6,12 148:12 150:1 196:17
--	--	--	---

[platforms - product]

platforms 7:18 13:22,24 87:10 121:25 122:5 123:10,18 124:23 125:23 171:10 please 13:12,13 14:7 32:10 37:12 51:7 54:15,21 69:18 86:11 88:25 142:21 180:19 198:8 203:18 206:13 plus 154:18,19 178:8 point 12:9 110:23 113:4,10 116:19 120:8 135:21 144:15 166:18 191:23 points 58:10 85:22 policies 77:8,10 93:11 116:15 120:13 139:7 policy 58:1,2 76:11,17,23 77:2,5 77:13,16 78:2 79:9 80:8,14,16 81:13 116:10 119:23 120:7 139:15 142:15 political 95:5 poll 66:7 portion 175:10 181:10 position 103:1 209:24 possess 156:4 192:22 possesses 44:1 possibilities 132:1	possible 18:6,11 22:2,12 30:6,16 44:13 83:19 84:14 84:23 85:6 107:17 124:24 142:16 144:14,19 145:22 155:9,13,15 160:16,20 178:7 178:14 182:25 192:14 post 82:19 83:21 85:3 posts 66:7 potential 11:12 68:3 194:4 powerful 129:20 powerpoint 8:14 147:4 162:5 practice 105:19 165:11 practices 175:8 pre 27:14 85:3 preload 27:6 preloaded 27:7,15 prem 81:3 premium 61:19 62:1,12 63:8 64:7 64:13,18,21 65:16 67:5 80:22 81:3 81:19 preparation 74:20 81:17 185:6,20 204:18 prepare 19:2 60:23 67:21 203:21 prepared 18:14 19:21 67:6,10 69:6,9,11 74:23 106:17 201:1 208:16,24 209:20	preparing 57:11 present 7:16 50:2 50:15,16,22 92:2 presentation 8:14 18:19 146:16 166:6 presentations 67:7 67:10 68:1 presented 36:11 presents 151:22 presumably 114:24 presume 66:15 prevent 116:23 previous 61:9,12 61:12 97:10 177:9 177:24 previously 58:17 87:15 90:13 115:24 122:16 150:12 157:14 184:19 price 52:1 202:17 principles 8:15 printed 173:21 prior 34:8 43:20 43:24 44:2 78:10 78:21 79:4 212:8 prioritization 63:15 prioritizing 80:24 priv 11:5 privacy 9:8 13:7 80:6,9,13 81:2,7 81:13,18 private 66:19 privilege 183:24 privileged 185:24 204:25 pro 118:15	probably 83:13 107:20 197:1 problem 43:17 62:11,17 118:23 145:4 183:1 procedure 213:19 213:20 proceed 62:9,18 68:5 81:15 proceedings 212:5 212:8,9,15 process 58:16,23 75:10 91:11 105:14 119:14 155:17 170:20 186:12 processes 12:18 181:18 procter 52:19 71:24 72:3,11 96:20 procure 139:16 produce 22:13 produced 20:12 30:23 55:2,3 68:15 producing 93:16 210:5 product 22:19,22 23:4 60:20 64:18 65:22,25 81:11,12 86:2 94:24 119:10 122:16 136:24 137:3 141:8,10,11 141:13,20,22 147:18 152:24 154:24 155:20 159:5,8,12 178:16 180:25 182:20 202:5
--	--	--	--

[production - range]

production 53:25 products 23:8 36:20 85:15,17 94:22 95:16,18,22 109:10 148:5 149:8 152:23 157:21 159:23 167:5 173:13 181:1,8,11 professional 2:20 212:2 profile 1:5 2:5 13:8 213:4 profits 16:8,9 program 26:18 27:3,6,19,20 115:18 167:17 199:17 200:24 202:5 programs 125:21 202:16 progress 57:8 project 112:8 114:2,12 projecting 111:25 projection 32:6 projections 56:6 67:2,21 103:2 projects 172:21 promising 63:22 properties 123:2,8 125:20 proposal 32:7 162:4 proposals 149:7 proposed 142:12 proposing 126:4 140:16 protective 1:10 209:5 210:9	proves 91:25 provide 31:6 42:4 84:15 101:1 104:8 108:16,21 114:4 123:23 131:19 144:20 173:7 200:1 provided 27:10 28:22 115:11,12 123:7 197:7 213:19 214:8 provides 108:9 123:5 providing 42:7,15 124:6 134:22 173:14 public 37:6 66:7 82:6 137:16 205:22 publicly 36:5 37:6 49:12 55:9 205:24 206:3,12,20,22 207:6 publisher 130:4 publishers 31:22 129:15,22 130:1 publishing 66:5 pull 21:25 130:13 183:19 pulled 47:3 pulling 43:3 120:19 pur 98:25 purchase 116:3 purchased 23:21 23:24 24:2 purchases 98:22 98:25 100:22 107:1 112:1 125:25	purchasing 95:9 purposes 71:4 90:20 110:5 187:10 189:15 pursuant 1:10 16:2 209:5 210:9 pursue 62:10 63:17,23 64:2,4,6 66:9,19 80:22 135:18 pursued 65:22 push 140:16 165:1 put 19:7 44:16 54:2 58:24 71:3 84:6 140:16 q q1 9:4 89:4 q1'18 69:19 71:20 q2 85:11 q2'18 85:11 quantification 16:15 quantified 16:12 quarter 46:4,7 56:5 quarterly 56:19 56:20 75:25 79:3 189:18 quarters 46:8 queries 193:14 query 155:2 question 19:9 20:9 21:16,18,20 24:17 29:13 30:10 36:3 48:10 71:12 78:18 78:18 81:6 83:23 85:14 89:19 91:13 92:9 95:3 97:17 97:18 99:12 113:1 118:22 120:4 125:10 126:24	127:13,24 132:22 134:3 138:24 140:3 144:5,10 145:3,8 154:13 155:4 156:2,3,8 161:11 164:13 165:7 166:14,16 170:7,10 175:6 176:4,21 179:17 180:4,13,16,18 184:8 185:18,25 186:1 189:6 190:13 196:21 198:4,8,12 201:10 204:23 205:1,3 206:10 207:14 questioner 145:5 questions 12:19 54:1 59:24 103:12 122:22 147:19 151:24 155:25 208:21 209:25 210:4 quick 113:12 202:23 quickly 54:5 99:5 quite 24:17 58:9 58:22 59:20 119:8 147:25 181:22 quota 57:6 187:9 quotas 76:1 189:18 r r 45:18 57:23 75:20 86:9 r&s 214:1,9 raise 14:6,7 ramp 31:7 ran 24:16 range 153:3,13
---	--	---	--

CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

[ranged - regard]

ranged 156:16	recall 16:21,23	146:4 148:17,19	referring 28:18
ranges 84:22	17:10 47:23 55:24	148:23 158:20	29:12 49:19 51:8
ranging 152:19	59:6 65:4 67:25	183:2,3,5,8,21	56:3 89:8 95:9,19
ranking 79:2	68:2 89:17 118:6	198:10,11 202:25	101:9 103:25
rate 88:2,7	120:24 121:2	203:3 209:8,12,24	107:24 150:20
rates 129:24	146:12 147:6,9	210:11,13 212:9	160:11,14,17
163:15	150:6 151:10,11	212:12	162:1 182:16
raw 119:18	185:11 200:17	recorded 36:5	188:24 199:8
rblume 6:12	receive 24:20	recording 116:10	205:14
reach 80:2 96:7	55:13 78:1 90:2	records 45:1,4	refers 28:16 36:25
129:16,19 142:10	126:25	49:8 94:12,15	37:18 54:11 82:3
197:14	received 16:19	106:6	82:22 85:6 89:12
read 70:9 99:12	26:13 55:15 77:24	recoverable 153:8	110:6 118:3
125:8 146:4 160:4	126:21 127:5	reduce 167:7	124:25 126:14
160:5 172:12	144:23 145:6	reduction 45:9	136:5 164:22
198:7,11 211:2	194:15	refer 33:7 39:7	166:6 169:8 174:4
reading 13:3	receives 89:23	44:24 71:3,6,8	174:19 187:8
78:16 176:6	116:11 127:11	72:23 77:21 83:9	191:19 207:19
195:15 213:23	128:3	101:12 111:14,16	208:3
214:9	receiving 114:7	111:17 136:2	reflec 68:10
ready 47:6 180:3	119:13,25 120:9	137:19 153:18	reflect 24:5,6
real 136:6,16	recess 69:1 113:15	162:21 163:7	40:15 44:2 46:13
really 54:4 68:21	148:21 183:6	174:21,23,25	77:1 87:7 106:6
80:24 99:5 172:7	203:1 209:10	182:18 184:25	110:17 127:8
reask 20:9	recognition	188:21 196:6,10	181:24 196:5
reason 15:22	119:23 120:7	196:13 207:25	204:12 205:11,19
22:11 30:5 62:18	126:16	reference 82:18	reflected 54:7
63:4,8 69:10	recognize 30:21	122:15 123:22	128:9
107:21 108:5	130:17 145:6	124:17 125:3	reflecting 18:7
148:3,6 155:15	146:10 149:4	136:10	22:13 43:5 94:4
156:4	159:18 188:6,8	referenced 25:25	reflects 18:18 32:3
reasonable 31:15	recognized 16:9	125:15 213:6	32:6 49:9 53:18
reasoning 163:13	recognizes 127:23	references 79:1	76:22 110:14
reasons 63:7 163:9	recollection 68:7	124:20 135:11	156:5 176:8
167:4	68:11 80:4 85:23	referencing 141:8	195:13 205:20
rebates 51:15	record 13:4 14:1	referred 52:6 65:8	refresh 17:16 68:6
54:11	43:4 51:3 54:25	72:4,7 73:3	refreshed 68:10
rebecca 1:20 2:19	68:23,25 69:3	117:25 124:7	regard 61:16 81:3
57:21 198:8 212:1	113:14,17 120:20	143:20 149:3	81:19 127:22
212:24	130:12 131:10	188:21	156:14 175:9
	138:3 145:25		190:7 197:25

[regard - revenue]

198:15 regarding 16:7,14 regardless 100:1 region 206:18,21 206:24 207:1 regional 182:10 regions 47:20,22 88:8 registered 2:20 209:23 212:1 regular 56:13,23 regularly 94:12 141:5 relate 87:9 208:8 related 61:12 66:6 101:6,7 155:25 relates 1:7 2:8 58:3 87:1 115:20 131:6 149:8 208:11 relating 16:9 27:19 68:3 90:15 97:10 99:2 109:10 130:22 relation 142:1 relations 142:4 relationship 121:16 relationships 128:4 relative 196:16 212:18 relatively 19:17 23:13 210:2 released 213:21 relevance 168:6 relevant 58:14 118:13 relied 116:4 remains 50:21 135:14	remember 151:5 151:19 remotely 1:14 2:17 212:6 removed 50:17 removing 142:18 repeat 81:5 91:13 92:8 118:22 120:3 132:22 138:23 140:10 181:21 184:7 189:6 190:13 203:17 repeating 145:2 rephrase 91:23 180:17 report 40:10 41:25 42:13 90:8 91:5 92:22,24 96:13 109:22,23 203:15 203:19 206:22,25 207:2,6 reported 1:14,19 2:18 37:5 43:20 46:17 49:13 55:10 205:18,22,24 206:3,12,15,16,20 reporter 2:19,20 2:21 13:11 14:3,5 14:9 17:8 30:2 37:14 46:23 54:18 57:21 103:6 108:25 120:15 130:10 137:24 142:23 148:25 158:13 183:10,13 203:5 212:2,3,3 reporting 47:19 48:14 57:9 101:1 101:8,14 102:9 172:17 175:1,15 175:25	reports 47:15 96:23,24 101:16 103:19 104:3 105:16 106:12,17 106:20 108:11 represent 23:12 24:12 110:13 177:16 representation 163:17 representative 1:13 16:1 197:21 represented 52:11 178:16 representing 12:10 represents 23:20 24:15 70:18 178:14 181:6,25 195:2 request 53:25 76:15 184:25 209:16 requested 212:16 214:1,9,10 requests 186:20 require 118:12 requires 101:4 research 201:19 reseller 51:15 resources 53:7 63:13,16,25 respect 42:11 61:14 80:13 81:7 102:24 104:13 118:13 147:15 responding 27:17 response 99:9 185:25 responsibility 187:24	responsible 56:22 57:1 91:20 92:17 92:19 93:3,15,17 97:14 128:8 141:12 rest 12:17 47:24 204:5 restate 144:13 170:10 result 24:8 25:9 32:7 39:24 106:15 106:16,25 107:1 117:20 182:19 results 56:6 91:5 171:6,8 retain 44:8 retained 22:16 44:6 84:12 retention 94:16 retract 107:20 return 113:22 213:17 214:6 rev 31:22 129:4 revenue 8:12 9:4 10:7 18:4,7,18,19 18:24 19:12,16,19 20:15 21:22 22:13 23:13,20 24:4 29:9,14,20 30:7,10 31:11,14 33:1,3 34:14,18 35:3,21 36:4 37:5,8 38:18 41:17,25,25 42:1,7 42:14,16,20,23 46:2,3,7 48:7,19 48:22 49:15,16,20 49:21,22,25 50:8,9 50:10,20,25 51:4,7 51:10,11 53:14,19 53:23 55:11,13,17 56:4,6,7 57:12
---	---	--	---

[revenue - saw]

58:4,5,8,13,23 66:17 67:4 72:4 75:5,6 76:17,22 77:2,9,22,24 78:1 79:3,3 82:8 83:20 83:24 84:3 85:11 88:13 89:23 114:23 115:3,6,11 115:15 119:23 120:7 126:16,22 126:25 127:5,11 127:23 128:3,18 128:21 129:4,7,25 132:13,19,25 133:3 139:19 140:4,6,14,19,21 140:24 141:6,15 142:6,13,19 144:23 145:6 147:22,23 151:22 151:25 152:2,12 152:19 153:8,10 153:14,19 154:8 154:17,18,18,19 155:9,17 157:7,18 161:18 173:17 178:24 179:2,4,5,8 179:9,19,20,21,22 179:23,24 180:20 181:3,7,12,14,17 182:1,1,3,4 187:2 187:9 189:8,16,17 189:22 190:5,9,18 190:20 191:10,13 192:9,16,24 194:5 195:7,9,17 196:18 196:22 197:9,24 198:14 203:16,20 205:18,21,21 207:2,4 208:11	revenues 16:8 20:2,5,19 21:7 48:3 49:6 53:19 56:23 57:5,14 134:2 180:24 review 9:5 30:25 47:5 55:11,17 138:6 158:24 162:9 184:2 185:5 185:8 204:17 212:15 213:8,10 213:13 214:2 reviewed 43:18 47:13 67:20 138:7 158:25 reviewing 36:15 68:6 207:9 reviews 92:10 revisit 49:19 rfi 184:25 195:10 rfi's 11:5 183:24 184:22 rfis 194:16,21,25 rhc 87:14 rid 153:8 154:3 right 14:7 16:17 17:11,22 35:5 38:16 40:12 41:18 45:23 46:2 48:6 49:13 53:9 59:4 59:15 64:3,14 66:10 67:22 69:15 69:16 72:5 76:10 84:4,8 87:14 88:4 88:22 91:15 92:4 93:22 94:6,13 97:5 105:10 106:2 108:11 110:4 126:20 131:12 151:19 155:10 158:8,10 159:16	160:3,5 163:18 165:20 166:9 174:7 175:21 176:9,18 181:19 184:15 192:25 194:12 195:21,24 200:18 ring 5:13 13:23 14:5 risk 139:19 140:4 140:6,14,19,24 141:6,15 142:6 152:6,19 153:14 154:5,8,9,17,18,18 154:19 155:9,17 155:18,21 156:16 157:18 182:10,18 robert 6:6 robust 63:21 rohrback 4:5 roi 135:6 role 57:24,25 59:8 59:11 60:18,19 106:13 184:12,14 184:15 188:16 roll 21:10 92:23 romano 1:20 2:19 212:1,24 rose 13:23 130:16 rosemarie 5:13 ross 6:16 roughly 86:23 145:20 row 23:9 32:3 176:6,12,23,24 177:18 178:14,15 178:16 206:16,18 206:23 207:1,3,3,5 207:12 rpr 1:20 212:24	rring 5:20 rudimentary 92:6 rule 16:3 rules 12:18 15:14 214:8 run 25:19 82:3,6,7 82:15 108:8 133:13 155:2 176:14 running 25:16 82:12 181:10 runs 108:14 132:10 133:10 s s 8:8 9:1 10:1 11:1 57:22,22,23 75:19 safer 135:13 sales 21:5 52:5,7 52:10,11,12,23 53:1,1,12,15 57:5 57:6 72:4,8,9,14 72:18,19 73:4 75:8,25 121:16 132:15 170:22 171:1 172:15,25 173:4 178:4,9,17 187:8,14 188:15 188:22,23 189:5 189:13,15,17 196:2,5,6,10,12,16 196:19,22 salesforce 21:7 sam 60:16 131:15 131:17 samsung 193:10 san 5:18 sandberg 130:15 131:16 146:7 saw 108:18 109:7 120:25 173:15 185:7
--	---	--	---

[saying - segment]

saying 156:1 166:19 179:14	schedule 213:10	209:18,19,20,23 210:1	135:25 136:8,18 137:15,16 138:13
says 22:19 31:6,18 31:20,21,23 32:13 34:13 69:19 71:20 76:17 77:19 81:24 85:11,15 86:12 88:13 89:3 96:21 103:14,16 108:7 110:8 111:12 114:1 116:19 117:20 118:9 121:22 122:3,10 125:17 131:11 132:9 133:25 135:25 136:7,13 137:16 138:20 139:2,19 146:7 148:11 149:11,11 152:2,5 153:14 162:12,25 163:1 164:3,18 165:18 165:22 167:10 168:23,25 169:25 170:13 172:14 173:7,8,24 174:10 176:6,7,12 177:2 177:15,19 178:3,4 178:24 179:8 182:10 187:2 189:8 191:10,20 191:23 193:4,9 194:3 195:6,9 196:2 207:23	schrage 146:6 schwing 5:14 13:23 science 152:24 scientist 141:15,21 scientists 141:10 scope 27:11,23 28:4,12,23 33:9,15 33:20,25 34:24 35:17 36:8 37:2 44:12 62:2,5,15 64:8 65:3 66:3,13 77:6,14 78:3 79:10,16,21 80:7 85:25 91:21 97:23 99:20 110:25 111:7 114:14,25 117:6,14 118:1,20 122:13 123:20 124:4,13 125:2 126:8 134:10,19 138:22 139:12 143:18 144:3,11 144:17 147:14 149:17 150:5,10 150:21 151:4,21 160:12 161:10,17 165:6,14 167:16 168:10,15 169:4,6 169:11 170:15 171:3,24 172:22 173:1,10 175:4,12 175:22 176:10,19 177:7 178:10 182:17 186:15,23 188:2 190:1,11,23 191:6 192:11 194:17 198:3,24 201:3,14,22 202:3 202:9,19 208:1	scrape 139:3 screen 70:1 206:9 scroll 121:21 206:9 scrolling 206:1 se 62:17 95:6 seattle 4:12 sec 37:7 42:4 43:5 43:15 47:3 second 31:17,21 39:15,17 113:24 126:16 148:18 149:10 173:12 177:11 194:11 195:20,21 207:11 section 125:4 see 12:11,20 17:17 23:10 25:14 31:5 31:9,17,19,25 32:12,16 42:21 45:8 71:20,23 74:17 76:5,12,13 76:19,20 81:24 82:1,18,20,25 83:2 83:2 84:25 85:15 85:18 87:4,23 88:13,19 89:5 98:10 103:13,23 104:4 109:6 110:10 111:11 112:7 114:1,9 116:19 117:3,19 117:22 118:8 119:4 121:22 122:1,3,8,23 123:3 123:13 125:3 126:1,2 131:15,22 132:8,16,17 133:25 135:1,8,16	138:17 139:2,8,18 146:17 147:1,5 148:13 149:13 151:22 152:2,7,10 153:16 155:6 159:16 160:7,10 161:5,20 162:3,6 162:10 163:19 164:8 165:2,25 167:13 168:22 169:2 171:8 172:18 173:17 174:1,12,16 177:1 178:4,23 179:6,22 182:9 184:21,23 185:9 187:2 191:9 191:20,22 192:6 193:4,6,7,12,16 194:2,9,11,23,23 195:7 196:1 205:24 207:22 seeing 36:15 68:2 108:19 121:2 172:5 194:21 seek 208:23 seeking 96:14 99:9 seen 31:13 47:18 55:22,24 69:7 109:3 121:7 138:11 170:23 184:4 206:14 seetha 60:22 114:24 seetha's 57:25 seethalakshmi 57:18 segment 98:13,16 125:25

[segmentation - sorry]

segmentation 53:11 123:10 124:3,11 segments 119:11 select 103:17 selecting 23:4 self 23:22 26:3 128:9,11 sell 129:23 143:23 165:23 166:12,20 selling 25:3 95:6 131:19 132:7 135:14 166:21,24 sells 133:16,19 send 96:20 103:17 104:14 161:4 194:25 sending 105:15 106:10 161:8,12 173:9 sense 81:14 145:9 147:18 150:9 178:20 sent 38:7 92:24 93:16,20 94:9 106:7 186:20 sentence 125:8 138:20 144:9 169:25 170:12 separate 90:16 separately 41:13 53:14 september 138:4 sequence 164:12 serve 26:3 128:9 128:11 server 23:22 service 29:7 35:16 35:25 36:7,20 38:2 54:8 82:6 110:7 137:8	services 35:14 36:22 51:14 set 24:8 26:4 77:7 84:16 92:19 93:5 95:23 100:3 105:2 107:24 108:1 127:23 142:17 143:9 199:1 202:1 202:17 212:6 sethuraman 57:18 sets 107:19,25 setting 35:18 93:3 settings 94:2 setup 107:22 sgrant 6:20 shaking 57:21 shaquille 6:14 13:24 share 12:20 17:11 29:3 31:22,22 41:9 76:17,22 77:1 88:13 104:13 106:13,23 107:3,9 107:22 129:4 132:13 147:23 shared 58:9 107:10 117:1,21 117:24 118:19 119:1 150:16 162:4 175:17 176:7,9,13 sharing 16:13 64:23,24 65:15 106:19 113:24 128:18,21 129:7 129:25 132:19,25 133:3 150:12,25 sheet 54:7 sheryl 130:15 131:16 146:7	short 54:21 shorthand 2:19 212:2,10 show 51:5 78:19 100:20,21,24 102:8 103:3 116:1 167:20 171:9,12 showed 157:12 168:7 showing 101:3 116:7 124:17 154:4 shown 28:19 86:24 106:24 116:3 159:25 171:18 shows 88:7 shut 137:8 si 135:25 136:2,15 sic 55:1,2 85:4 86:12 88:12 163:14 side 173:13 sign 36:11,18 213:16 214:5 signal 136:3 signals 135:25 159:5,7 signature 212:23 213:21,23,23 214:9 significant 157:13 signs 36:13 similar 22:3 78:19 97:9 109:25 112:23 143:24 157:6 158:5,5 167:18,22 168:2,5 simply 135:2 simultaneously 109:18	sister 52:25 sit 80:5 158:6 site 35:24 38:5 135:4 sites 193:15 sixty 17:5 size 131:18 196:15 slide 10:16 32:10 32:21,23,25 34:13 34:13 35:1,7 74:20,24 75:23 76:2,5,21 79:1 87:22 148:10 165:22 175:23 177:9 182:9,16 slots 25:3 small 196:15 smaller 53:4,5 181:13 196:16 smb 196:8,13,14 196:19,22 solemnly 14:9 solutions 187:13 187:18 189:2,3,9 213:7 somebody 35:22 35:24 141:5 184:16 someone's 87:2 somewhat 109:25 sorry 14:6 17:2,19 37:6 38:24 48:17 49:18 51:21 59:10 69:21 78:14 86:17 88:11,15 89:19 90:9,19 91:13 96:16 97:16 105:7 109:18,20 118:21 120:3 125:5 131:10 132:21 140:10 148:15
---	---	---	--

[sorry - subheading]

150:17 157:10 159:19 164:3 165:10 166:14 170:6 177:8 184:6 184:7 185:17 189:3 192:1 196:21 198:4,8 204:2 206:7,10 sort 25:12 32:20 36:16 82:6,8 108:21 127:10 140:21 155:21,21 172:10 173:21 sound 201:23 sounds 12:7 139:14 142:14 source 20:7 42:9 70:6 187:4 194:6 203:25 204:6 sources 20:10,13 20:14 21:22 23:13 50:9 space 117:1 spe 57:6 speak 57:12,16 58:25 60:23 61:5 68:20 115:3 186:6 192:23 speaking 19:14 special 7:6 9:23 12:5,6,22 13:25 14:1 131:11 210:10 specific 21:2,8 25:5 26:7,18 29:4 29:6 38:4 41:17 55:25 56:2,17 57:7 58:20 61:11 61:23 65:6 67:9 79:12 80:15 86:2 86:25 95:18	105:22,23 108:1 109:24 111:24 113:5 125:14 126:13 128:13,21 137:4 146:12 150:3,7 152:14 153:15,24 154:5,8 155:25 173:14 181:11 182:10,19 191:8 195:18 199:8,24 specifically 19:23 24:5 25:16 32:6 41:21 42:7 43:7 58:12 64:23 75:7 75:24 79:2 95:18 100:19 101:22,24 102:10 103:12 105:2,18 111:19 115:22 117:16 118:3 121:3 160:14 189:14 191:19 200:7 208:3 specifics 128:25 208:19 specify 94:25 95:12 108:2 spell 57:19 spend 53:6 76:10 76:11,18 77:20 78:5 82:19,23,24 83:8,10,13,15,21 84:2,16 104:16 130:3,5 154:4 157:13 171:6 173:4 spenders 52:18 spending 181:9,9 spent 77:22 207:4 207:13,15,20,21	spoke 50:11 59:3 98:4,5,7 143:22 sports 96:2 spreadsheet 11:14 203:9 stand 31:10 52:21 75:9 87:13,17 134:13 135:10 187:12 standard 65:12 127:21 135:6 standing 43:14 47:8 stands 26:24 31:15 32:8 52:23 85:21 86:20 88:2,8 134:15 136:3 174:3 185:4 187:11 189:2 196:14,14 star 165:22 166:2 166:19 start 160:5 173:23 199:18 started 124:20 starting 135:2 169:16 206:21 207:1,2,5 starts 159:18 state 14:10 43:4,13 47:7 213:9,12 statement 49:19 133:12 209:14 statements 205:22 states 1:1 2:1 48:12 155:10 statistically 157:12 statistics 109:9,16 stay 165:1	stenographic 183:2 198:10 stenographically 1:19 step 92:1,8 154:25 stephanie 34:2 stepped 170:4 steps 91:9,16 186:6 stimulate 99:9 stipulation 213:20 store 20:22 125:21 171:14 stored 116:25 stores 171:9 173:5 stories 87:20 strategic 73:6,11 73:23 74:1 strategies 63:5 strategy 8:16 16:14 streams 8:12 18:4 18:7,18,19,24 19:13 22:14 51:7 51:10 53:20 street 3:11 5:16 6:8 7:7 strike 20:9 24:21 43:8 44:18 74:18 82:10 106:4 112:25 118:16 145:23 182:8 188:7 201:9 string 9:12,22 10:10,20 11:4 147:3 188:9 structure 60:7,8 structured 60:2 127:7,10 subheading 122:24
--	---	---	--

[subject - teams]

subject 9:12,22 10:4,11,21 11:5 131:4,10,11,13 183:23 184:21 186:8	189:7 190:15 195:2 197:5 202:24 204:23 205:16 206:25 208:2 209:13	131:18 134:7 145:24 148:4 171:13,16 179:25 182:22,24 183:18 186:6 192:2 193:18 202:22 209:6	143:4,11 144:21 145:11,16 147:18 147:23,25 153:6 153:24 155:2,5 157:21 159:23 167:2 168:2 175:24 176:15
subscribed 212:21 subscribers 29:6 98:14 subsequent 127:22 subset 73:22 substantial 31:6 209:25 suffered 80:5 sufficient 42:13 suggested 85:16 85:24 88:14,21 suggests 126:10 suite 3:12 4:11 5:17 6:9,17 summary 10:21 21:11 56:4 109:9 195:7 sunset 54:9 support 73:21 150:1 175:18 supported 53:3,18 72:9,10 140:23 supports 72:14 sure 21:24 42:10 43:11 44:5 45:3 60:19 63:18 64:3 66:23 70:11 72:21 77:17 79:4 93:5 94:16 96:18 100:10 105:23 107:17 108:3 111:1 125:13 132:23 138:25 161:25 162:16 169:7 176:2,24 184:15 188:16	surface 206:5 suspending 192:3 192:10 sustainable 62:7 62:13 80:24 sv 87:14 88:21 swagging 131:18 swears 13:11 system 94:4 153:5 systems 58:6 109:25 167:20	takeaway 32:21 32:23 58:21 taken 2:14 63:24 69:1 79:12 113:15 148:21 183:6 203:1 209:10 212:5 talk 15:17 26:21 33:18 35:2 112:14 180:3 talked 96:24 126:19 132:10 161:21 163:4 talking 25:8 26:25 69:21 88:16 172:1 tar 167:25 target 96:1,2,21 97:20 100:12 108:2,7 118:11,18 118:25 134:22 targeted 99:6,7,17 210:4 targeting 94:22,24 95:16,18,22,22 96:11 98:1,12,16 98:16,19 99:2,22 100:3,4,9 101:7 107:6,12,14 108:1 118:10 119:11,21 122:19 123:10,24 124:2,6,18 129:20 134:1,4,6,6,21,24 135:12,19 141:20 141:22 142:18	targets 32:15 tasked 187:24 tcl 28:11 team 19:22,24 20:13 21:21 23:15 33:21,24 46:15 52:12 53:1,3 55:16,21 56:21 58:11 59:12,13,15 59:17,18,20,22 60:1,6,9,11,15 61:3 67:14,16 72:9,10,23 73:4,17 73:25 74:6,7,10,12 75:1,4,6,7,13,22 76:2 79:18,20 91:12,20 92:22,22 93:3,8 111:9 113:9 121:16 130:25 142:1,4 152:24,25 159:6,8 159:12 163:2,2 168:19 187:9 188:15,15,19,22 189:5,14 197:15 200:6 204:7 team's 189:17 teams 53:11 56:8 56:10,25 57:3,5,7 57:7,9,13,13 67:3 67:11 92:16,18 97:14 113:7 114:2 154:23
	t		
	t 5:13 8:8 9:1 10:1 11:1 57:22,23 75:19 79:24 tab 17:5 29:23 37:12 46:20 54:15 137:22 142:21 158:11,15,17 194:3,11 195:6,20 195:20 205:15 206:2 207:10,11 208:5,8,11 table 23:9 65:20 88:6 110:17 112:12,16 177:10 177:12 181:6 205:15 tables 23:10 take 32:13 35:7 39:11 42:25 46:8 46:18 47:5 49:6 54:21 68:16 81:1 91:4 96:9 108:23 110:17 113:12 116:2 122:17		

CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

[technical - today]

technical 58:9 140:17	texas 6:18	135:11 143:19,21	tie 171:18
technically 99:6	texted 163:4	145:8 150:12,14	tier 53:4
technologies 119:15	thank 12:25 16:18 17:21 44:15 49:23	151:14 152:25	till 191:11
technology 21:21	51:18 68:13 76:4	155:15 156:4	time 12:7,15 13:5 15:14 18:22 21:23
tell 17:18,20 52:22 55:8 58:7 76:15	79:25 85:9 86:10	159:14 163:13	21:23 22:1,17
76:22 180:19	87:21 88:10 89:14	169:23 170:4,7	23:14 26:8,15
206:8	99:24 124:9	171:19 172:2,9	30:24 39:10 42:22
ten 16:2	142:20 148:8	177:25 180:2,5	46:3,5 49:17 50:3
term 26:23 27:1 33:11 73:2,11,14	182:6 198:19	181:22 182:22	50:19 51:1 52:5
73:23 89:11 90:14	207:8 209:1,3	189:2 190:13,14	53:2 54:1 59:3
94:19 101:10,12	thanks 89:18 208:20	197:15,19 199:9	63:15,20 64:5
117:16 134:11	thing 65:7 98:23 100:6 141:7 172:2	199:25 206:15	72:20 79:20 85:7
166:5 201:18	206:14	207:4,9	86:6 87:24 97:21
terms 35:16,19,25 36:6,10,15,19,23	things 14:4 54:1 56:9,10 63:18,25	thinking 57:4 115:21,23	105:17,22,23
39:23 118:12	64:4,21,22 95:24	third 4:10 24:20 25:3,4 29:20 91:5	110:23 112:17
126:16 127:6	96:1,3,4,5 104:10	91:25 92:3,3,24	113:4 120:4
128:9,15 153:2	122:15 169:13,22	97:19 102:4 107:6	130:25 139:24
155:18	169:22 177:13	116:12 119:25	140:3,13,21
tes 80:20	206:3,11	120:10 125:1	141:19 142:1
test 66:4	think 12:24 19:16 21:19 22:12 23:16	128:23 143:5,7	144:16 146:5
testified 15:3,10 72:2 80:21 199:10	24:25 26:12 27:12	160:9,22 162:9	149:15 150:14
199:14	27:12,14 30:6,17	167:8 170:19	155:12 156:6
testify 15:23 16:7 197:21 208:16,24	36:10 37:19 41:5	199:4,11,20	159:6,11 161:8
210:3	42:19 43:1 47:18	200:15 208:5	166:11,18 168:19
testifying 16:1 212:8	51:13,16,17 52:17	thomas 188:12,13	182:4 184:13
testimony 14:10 27:17 102:12	55:15 56:16 62:17	thought 62:12 132:10 150:18	195:17 200:6
201:2 203:18	63:12,20 68:16	188:21	203:16,20 207:4
204:3 208:23	69:10,14 70:2	thoughts 131:20	207:12,15,20,21
209:19 211:4	75:3,10,21 76:25	thousand 86:21	207:23 208:21
212:12	84:3 85:6 87:17	thread 130:21 170:18 187:21,23	210:14 212:6
testing 65:24 66:2	91:14 93:2 102:25	187:23	213:10,18,24
	104:23 106:22	three 17:3 31:23 46:8,11 85:1	214:7
	107:19,21 108:5	177:12 179:6	times 28:18 144:8
	109:7 119:7,9	202:23	tired 198:9
	121:21 124:7	thursday 1:16 2:17 12:1	title 59:5,6,7 60:19 110:13 162:17
	130:2 133:7		titled 10:16 11:10
			today 12:10,15 13:16 15:23 16:7 18:8,14 57:12

CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

[today - understanding]

60:24 67:22 112:19,20,23 129:12 131:20 135:5 139:4 146:8 155:15 158:7 163:3 185:6 201:2 210:4 tomorrow 10:12 146:18 tool 123:23 163:11 tools 122:19 123:2 top 9:12 71:20 72:15,24 78:7,12 78:15,22 79:1,6 81:22 86:13 111:12 120:25 122:23 127:15 130:15 160:5 164:2 170:20 172:11 173:18 topic 16:2,5 68:7 80:3 209:21 210:1 210:2 topics 66:7 81:17 208:23 210:3,6 total 39:25 42:20 42:21 48:18 49:21 49:24 50:7,8,10 53:5 130:5 140:19 145:19 152:5 154:9,24 156:16 179:2,3,20,22 181:3,7,14,16,25 182:1,2,4 191:10 191:13 205:17 totals 81:24 touch 172:16 174:22 175:14 tpid 125:1 track 20:15 21:22 38:21 40:3,14	43:24 53:23 57:5 57:8 75:25 82:11 90:8 91:4 93:4 94:8 96:25 97:3 116:21 144:23 189:16 tracked 20:19 23:14 88:3 tracking 53:13 56:22 57:2 77:9 83:14 tracks 40:21 75:5 187:9 189:14 transcribed 212:11 transcript 159:2 209:4 210:8 211:2 212:12,14,16 213:6,8,10,13,13 213:21 214:2,2 transhon 28:10 transmitting 114:6 trap 21:2 treating 124:15 trend 89:4 trends 203:16,20 trigger 91:6 127:8 true 124:1 166:21 206:17 211:5 212:12 truly 87:23 truth 14:12,12,13 try 38:3 63:17 99:21 102:8 154:14 169:17 179:17 191:22 trying 21:2,3,10 25:11 36:10 63:4 63:19 91:24 100:16 102:11	109:19 152:18 176:25 turn 12:12,16,24 14:3 32:9 69:13 69:18 85:10 86:11 88:25 103:4 109:13 121:18 151:21 162:24 turning 71:17 74:16 88:11 103:13 110:2 112:3 133:24 149:10 152:1 164:1 173:16 174:9 twice 39:13 two 11:10 12:19 22:18 39:8,12 65:18 76:16 88:12 97:24 125:6 159:3 163:9 194:3 199:15 200:13 type 71:7 100:13 155:1 177:17,20 177:21 types 56:9 67:5 90:15 128:21 173:15 175:16,18 177:13 typical 41:6,7 typically 141:9 154:23	uk 154:19 ultimately 66:8 unblocking 89:3 uncertain 112:22 underlying 43:15 47:10 53:18 140:23 underneath 110:13 understand 15:14 15:19,25 16:6 21:3,10,19 24:17 31:10 35:21 42:6 47:14 57:6 58:3 59:16 63:4 65:24 66:5 69:5 93:9 98:7,8 101:3 102:12 112:14 113:19 123:15 126:3 130:24 134:20 136:5 137:13 138:19 140:22 142:10 146:21 149:23 152:18 153:12 154:7 162:20 168:24 169:24 170:8,11 171:5 174:4 177:5 179:14 180:20 181:22,24 188:24 189:13,17 191:13 192:8,24 194:14 196:5 205:10,18 205:20 understanding 9:17 21:23 32:2 32:18,22 34:15 44:3 49:14 50:2 53:2 58:15,16 71:15 72:14 77:4
		u	
		u 45:18 47:23 57:23 79:24 86:8 162:9 203:12 udid 116:24 uh 19:5 69:24 152:21 uids 138:16,21	

CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

[understanding - visited]

77:8 78:25 83:11 89:7 92:6 108:13 110:12 114:22 115:2 116:8 120:22 123:21 125:10 128:1 131:3,24 133:14 133:18,22 134:5 139:10,13 142:11 149:18 154:22 156:21,22 164:10 164:14 169:15 173:2,11 175:13 182:8,15 195:12 196:9 understood 47:12 54:14 181:15 unequivocally 166:15,20 unilever 52:19 71:24 72:3,12 193:11 unique 106:1 united 1:1 2:1 48:12 155:10 unmute 12:12 updated 162:4,13 162:14,18 upload 118:12 uploaded 163:11 usable 119:20 usage 100:13 use 26:23 27:1 38:17,21 39:9 44:25 70:25 71:14 72:21,23 73:11 93:12 96:10 98:15 98:16 100:8,15 101:4,10 105:3 115:20 121:22 122:18,24 123:25	129:10,12 132:13 136:14 139:16 144:9 149:8,24 150:2,4,7 153:20 155:1 163:18 166:5 168:5,23,25 170:1,8,13,21 172:10 176:14 196:17 199:15,24 200:13 useful 147:20 user 1:5 2:5 13:8 16:11,13,15 29:14 35:3,10,15,22 36:4 37:5 38:18 39:14 39:14,15,16,19 40:4,15 42:14,17 103:17,22 105:15 107:5,10 113:24 116:21 120:9 122:6,12 124:24 124:25 125:9,23 126:6,12 135:3 136:14,15 166:21 167:3 176:6 202:1 202:17 207:2 213:4 user's 16:10 166:13 users 28:22 29:2 36:6,21 37:1,10,17 38:9,14 39:2,3,6,7 39:23,23,24 40:11 40:14,22 42:1,21 42:23 44:24 45:6 46:1,5 49:7 71:3 97:20 99:6 102:4 103:20 106:19 107:4 110:17,18 110:19 111:20 112:6,9 114:4	119:25 136:21 169:19 200:20 201:6,12 202:7 v v 75:19 86:8 valid 136:17 validating 136:14 136:21 valuable 64:1 value 16:12 101:16 102:4,19 103:18,20 104:2,7 105:16 106:7,10 106:17,20 108:11 111:12,16,17,20 111:25 112:8,14 112:20,23 113:3 116:11 132:11 variety 104:24 various 21:22 33:2 126:12 131:7 171:9,17 vc 1:6 2:6 venkatesh 75:17 ver 136:5 verification 91:10 137:1 verifying 136:6 veritext 13:10 213:7,9,11 verizon 98:11,14 98:15 versus 33:4 45:8 50:18 157:15 vertical 70:15,17 70:21 71:8,13,14 208:12 verticals 69:20 71:4 208:5 victor 75:19 86:9	vid 90:12 video 1:14 2:18 9:13 12:12 26:11 90:5,9,10,18,22,24 92:10 97:12 126:20 videoconference 1:14 2:18 3:2 4:2 5:2 6:2 7:2 videographer 7:19 13:2,9 14:4 68:24 69:2 113:13,16 148:19,22 183:4,7 202:24 203:2 209:8,11 210:12 videos 85:16,24 88:14,21 90:12 97:12 view 42:12 viewpoints 201:17 201:21 202:1,13 views 26:11 40:16 40:21 41:18 89:16 89:24 90:5,9,10,11 90:14,15,18,18,22 90:24 97:12 126:20,20 violate 77:9 violates 139:6 violating 76:11,17 76:23 77:2,5,13,16 78:2 79:9 80:16 139:15 142:15 violations 80:6,9 80:13,14 visibility 119:17 visible 108:4 vision 166:6 visit 41:7 visited 37:20,22,25 38:10,13
---	---	--	--

CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

[visiting - weaver]

visiting 35:13	169:23 171:16	73:2,10,16 74:7,11	144:8,12,14,22
voip 207:23	199:24	74:16,25 77:3,11	145:4,22 146:10
volume 1:17 8:4	we've 73:21 84:12	77:17,18 78:6,10	147:1,11 148:8,9
80:18	89:15 119:14	78:16 79:7,14,19	148:14,15 149:1
vs 85:3	143:20 149:2	79:25 80:1,10,20	149:20 150:3,8,17
w	155:22 209:23	81:8,16 82:17	151:2,7,11,16,20
w 4:8 7:7 34:3	weak 163:13	83:6,7,18 84:2,6	152:1 154:1,7,14
wait 180:15	weaver 3:7 8:5	84:24,25 86:3,10	154:16 155:8,14
waiting 30:4	13:14,15 15:6	86:15,17,19 87:11	156:11,14,24
waived 213:23,23	16:25 17:5,10,24	88:10,15,17,20	158:10,15,19,23
waiving 213:20	18:13,17,23 19:4	90:7 91:15,22	160:16,21 161:13
walk 12:17 58:18	19:11,20 20:6,21	92:16 93:18 94:3	161:16,19 162:2
122:20	21:1,13,17 22:8,10	94:11,18 95:11,17	162:20,24 164:1
wang 34:2	22:11 23:3,6,16	96:12,18,19 97:5,8	164:23 165:10,17
want 26:5 45:23	24:4,14,19 25:2,10	97:16 98:3 99:11	166:8 167:9,22
68:17 96:7,21	25:11 26:17 27:2	99:24 101:8,20	168:13,17 169:5,9
108:7 115:25	27:16 28:2,8,14	102:11,18 103:3,8	169:14,24 170:2,6
163:16 171:5,7	29:8,15,19,23 30:4	103:11 104:22	170:10,11,25
173:3 197:20	30:11,18 31:4,16	105:7,25 106:18	171:22 172:13,14
wanted 33:17	32:9 33:13,17,23	107:3,13 108:22	172:25 173:7,16
48:25 49:5 64:3,4	34:3,12 35:2,7,9	109:3,20 110:2,21	175:5,7,20 176:3,5
142:5 160:4 167:6	35:20 36:24 37:4	111:5,10 112:3,13	176:16 177:1,25
167:7 179:24	37:11,16 38:23	112:24 113:11,18	178:2,12,18,21,23
189:21 190:4,17	39:5 40:3,7,19	114:16,20 115:5	179:16,18 180:2
196:4 197:9	41:14,24 42:12,24	115:10,17 116:16	180:15,19 181:2
wants 96:20	43:3,17,19,23 44:7	117:9,19 118:4,23	181:15,16,23
washington 1:23	44:15,17 45:16,17	118:24 119:22	182:21 183:1,3,15
4:12	46:18 47:1,12,14	120:5,6,17,23,24	184:1 185:5,17,19
waste 53:25	47:21 48:9,25	121:14 122:20	186:3,11,19 187:1
way 25:17,25 33:7	49:8,12 50:12	124:1,9,10,19	187:22 188:5
45:9,17 49:2,4	52:20 53:24 54:4	125:5,16 126:15	189:3,7,8,21 190:4
84:6 96:8 99:12	54:14,20,22,25	127:2,6 128:17,23	190:15,17 191:1,9
101:5 112:23	55:4,8,22 56:21	129:1,6 130:6,12	191:20 192:19,22
117:18 126:6	57:3 59:23 60:10	130:17 131:9	193:3,18,25 194:2
127:10,21 139:15	60:14 62:4,11,20	132:8,23,24	194:18 195:19,22
140:17 154:15	64:5,12,17 65:1,11	133:24 134:13	195:25 196:1,24
171:12 197:3	65:14 66:8,17,25	135:1,24 137:2,11	197:5,7,16,19,23
ways 20:18 25:18	67:11,15,20,25	137:22 138:1,5,25	198:7,19,22 199:1
25:20,22 40:25	68:9,13,22 69:4	139:1,18 140:5,12	199:3,10,18 200:4
41:2,11,22 94:25	70:2,5,8,11,13,14	140:13 141:4,23	200:19,23 201:5,9
104:9 161:4	71:2,10 72:13,22	142:20,25 143:25	201:11,16,25

CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

[weaver - zuckerberg]

202:6,12,22 203:7	204:8	x
203:11,13 204:2,8	words 120:21	x 8:1,8 9:1 10:1
204:14 205:5,7,16	work 57:7,10	11:1 212:16
205:17 206:7	60:20 61:9,11	xx 214:9
207:22 208:4,13	75:24 89:13 119:9	y
208:20 209:1	141:11 142:9	y 75:20
213:1	150:24 152:23	yeah 21:12 22:10
web 1:14 2:18 3:2	159:2 184:18	24:18 45:16,19
4:2 5:2 6:2 7:2	188:14	46:21 54:6 57:20
87:14	worked 34:1 60:16	74:22 89:22 94:17
website 171:17	60:20 75:18	105:23 117:15
websites 129:17	112:17 141:19,25	118:23 125:7
171:8,14	142:3 144:20	129:1 140:5
week 11:6 149:11	167:19 174:20	164:16 166:16
183:25 184:22	188:18	173:20 186:9
weekly 56:13	working 32:24	196:25 197:6
weeks 109:11	108:15 141:22	year 23:18 76:7,7
wehner 60:6,15	150:23 161:17	87:24,24 202:2
weird 12:7	168:18 200:5	years 31:8 145:13
went 94:5	works 17:11 57:25	155:19
wf 87:13	59:12 73:17 75:7	yesterday 109:7
whatsapp 123:12	93:8 184:16,19	yielded 158:7
whereof 212:20	world 47:24 48:11	young 55:3,9,20
window 17:13,16	132:12 164:4	z
111:3	worldwide 8:21	z 79:24
wireless 27:25	47:16,19 87:3	zebra 79:24
28:2,7,25 98:6,8	worse 152:9	zoom 1:12
98:11,14,15	154:10	zte 28:10
wish 166:7	worth 101:25	zuck 162:8
withdraw 97:17	102:15	zuckerberg
witness 13:11	writes 160:7 161:1	131:16 162:14,19
15:10 43:10 68:21	164:5,6,24	162:21
170:3 193:22	written 127:12	
208:22 209:17,19	wrong 97:18	
210:5 212:20	wrote 131:17	
213:13,16 214:2,5	135:2,13 138:13	
witness's 70:3	161:20 162:8	
witnesses 210:3	164:3	
women 99:15		
word 25:1 71:14		
144:9 170:9,12		

Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

DISCLAIMER: THE FOREGOING FEDERAL PROCEDURE RULES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

THE ABOVE RULES ARE CURRENT AS OF APRIL 1, 2019. PLEASE REFER TO THE APPLICABLE FEDERAL RULES OF CIVIL PROCEDURE FOR UP-TO-DATE INFORMATION.

VERITEXT LEGAL SOLUTIONS
COMPANY CERTIFICATE AND DISCLOSURE STATEMENT

Veritext Legal Solutions represents that the foregoing transcript is a true, correct and complete transcript of the colloquies, questions and answers as submitted by the court reporter. Veritext Legal Solutions further represents that the attached exhibits, if any, are true, correct and complete documents as submitted by the court reporter and/or attorneys in relation to this deposition and that the documents were processed in accordance with our litigation support and production standards.

Veritext Legal Solutions is committed to maintaining the confidentiality of client and witness information, in accordance with the regulations promulgated under the Health Insurance Portability and Accountability Act (HIPAA), as amended with respect to protected health information and the Gramm-Leach-Bliley Act, as amended, with respect to Personally Identifiable Information (PII). Physical transcripts and exhibits are managed under strict facility and personnel access controls. Electronic files of documents are stored in encrypted form and are transmitted in an encrypted fashion to authenticated parties who are permitted to access the material. Our data is hosted in a Tier 4 SSAE 16 certified facility.

Veritext Legal Solutions complies with all federal and State regulations with respect to the provision of court reporting services, and maintains its neutrality and independence regardless of relationship or the financial outcome of any litigation. Veritext requires adherence to the foregoing professional and ethical standards from all of its subcontractors in their independent contractor agreements.

Inquiries about Veritext Legal Solutions' confidentiality and security policies and practices should be directed to Veritext's Client Services Associates indicated on the cover of this document or at www.veritext.com.